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ABSTRACT

Fourteen conference papers on university education in South Korea and Japan are presented in this document. The papers cover administrative, social, student, and teaching issues and are grouped into six sections based on the major themes of the seminar. The sections are as follows: (1) university administration and management, including "Some Reform Policies for Korean University Administration and Management" (Myong-won Suhr) and "Organization and Administration of Universities in Japan" (Soichi Iijima); (2) social functions of university, including "Changing Structure of Japanese Higher Education" (Ikuo Amano) and "Social Service Functions of the University: Focusing on the Opening of the University (Kyu-whan Lee); (3) student guidance in university, including "The Nature and Scope of Student Participation in Policy Making in Academic Government" (Hyoung-heang Lee) and "About Students Who Are Mentally Ill on Japanese Campuses" (Taizo Kato); (4) teaching functions of university and curriculum, including "Curriculum and Teaching at Japanese Universities" (Kazuyuki Kitamura) and "Problems and New Directions of University Curriculum in Korea" (In-jong You); (5) teaching methods and education technology for university, including "Problems of Teaching Methods in Korean Higher Education" (Choong-hoe Kim) and "Educational Technology for Improving University Teaching" (Takashi Sakamoto); and (6) research functions of university and graduate school, including "Japanese Higher Education and Its Problems" (Morikazu Ushiogi) and "Research Role of the University and Graduate Education" (Wan-kyoo Cho). Two papers are presented as a summary: "Summary and Discussions on Papers of Korean Speakers" (Joung-kyu Whang) and "Reform for Survival in Japanese Higher Education" (Toru Umakoshi). A profile of contributors and list of participants are also provided. (KM)

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the 6th International Seminar

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3

PREFACE

It is five years since the Korean Council for University Education was established to promote the healthy development of higher education in Korea by expanding automomy in universities and encouraging inter-university cooperation.

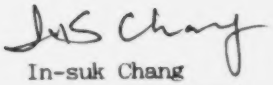
During the past five years, we hosted several international seminars dealing with major issues such as inter-institutional cooperation in higher education, university finance, and university evaluation. Especially, in 1985, we hosted an international seminar for the development of higher education in Korea and Japan in which academic reforms, inter-institutional cooperation and distance education of the two countries were discussed.

Due to a great need for furthering mutual understanding of Japanese and Korean university education, on the occasion of the fifth anniversary of its foundation, we decided to hold another seminar dealing with higher education in both countries in depth. Thus, '87 international seminar on "Current Issues in University Education of Korea and Japan" was held in Seoul during July 7-8 in the presence of a lot of distinguished scholars from Korea and Japan. Through this seminar we would like to get a much clearer picture of current issues of university education in Korea and Japan, and to form the basis for the future research and cooperation for the development of university education in both countries.

The present volume contains fourteen papers by the invited speakers of the 1987 international seminar, and they are grouped into 6 sections based on the major themes of the seminar and summary. I hope this book proves to be of great value to all those interested in higher education of Korea and Japan.

Finally we would like to express our sincere appreciation to the contributors for their invaluable papers appearing in this volume and all participants and related organizations for their whole hearted support and cooperation.

September 1, 1987



In-suk Chang
Secretary General
Korean Council for University Education

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Opening Address

Chi-sun Kim, JSD
Chairman, KCUE

President Iijima, Dr. Suhr, distinguished guests, ladies and gentlemen, it is my great pleasure to open the international seminar for the development of university education in Korea and Japan. On behalf of the Korean Council for University Education (KCUE), I would like to extend my warmest welcome to all of you, particularly to the Japanese delegates who flew over the Sea of Japan to participate in this seminar.

The KCUE established in 1982 to enhance autonomy and to promote healthy development of college and university education in Korea has hosted several international seminars on higher education to indentify current issues in higher education and to organize ideas of different countries for the development of higher education. In '85 KCUE seminar, the development of higher education in Korea and Japan was investigated by eminent scholars of both countries to seek major issues and future prospects in higher education. Recent academic reforms, inter-institutional cooperation and distance education in higher education of two countries were discussed and some invaluable ideas were raised in this seminar. The KCUE considered another international seminar should be necessary and helpful in order to further mutual understanding of Japanese and Korean university education and decided to host this seminar.

In this seminar, several aspects of university education in Korea and Japan will be discussed under the theme of current issues in

university education of Korea and Japan. Japan and Korea have shared cultures over thousand years and have developed similar higher education systems after the Period of Enlightenment. Two countries, therefore, might have been experiencing more or less similar issues, difficulties and problems in university education. The main objectives of this seminar are to identify some of these problems and to exchange their views and ideas to resolve the identified problems more effectively and efficiently.

Today universities in all the nations of the world are confronted with the tasks of educational reform and self renewal, to meet the pressure and new aspirations from inside as well as outside of university. Especially we have to solve the problems of educational quality and condition resulting from the rapid expansion of university population during the relatvely short period. At this moment of critical importance,it will be both useful and meaningful to share the ideas and experience of educationalists from Japan and Korea

It is my sincere hope that this seminar could serve a rare opportunity not only to identify the current problems in university education of Korea and Japan but also to strengthen heartful friendship between two countries.

Finally I would like to thank to all participants, especially to the speakers and chairpersons for their valuable contribution to the seminar.

I now declare the Sixth International Seminar for the Development of the University Education be open with the hope that all of you could spend productive and enjoyable time during the meeting.

Thank you very much.

TOPIC I

UNIVERSITY ADMINISTRATION AND MANAGEMENT

Some Reform Policies for Korean University Administration and Management

Organization and Administration of Universities in Japan

SOME REFORM POLICIES FOR KOREAN UNIVERSITY ADMINISTRATION AND MANAGEMENT

Myong-won Suhr
Chairman, the Presidential Commission for Education Reform

As a university has grown its mission and size, its administration and management has become more complex and difficult every year. The role of a university is already not production of a few elites from a privileged social class, but providing a higher learning opportunity for the mass with various abilities, interests and backgrounds.

The campuses are, with few exceptions, crowded with plenty of students, but there are, comparatively, few faculties. Financial support is not satisfactory. Therefore, the quality of education tends to become more mediocre or poor every year.

Meanwhile, we are living in a highly competitive world. Competition among nations is becoming keener and keener in the years to come. Therefore, the "pursuit of excellence" rather than "equal opportunity for all" is the motto for educational reform in many advanced countries.

The most important reform for Korean universities is, without exception, quality improvements in instruction, personnel, facilities, etc.

In order to achieve these reforms successfully, there are at least two conditions. The first is to provide more autonomy to the university, and the second is to secure more financial resources for improvements.

In developing countries, like Korea, there is strong demand for learning opportunities. In order to meet this demand, the quali control of education tends to be unsatisfactory. Eventhough we are not yet completely free from this demand, Korea has reached the stage of good quality education rather than empty academic degrees or diplomas.

I. Student Quotas, Admissions, and Their Impact on Management

At present, the Ministry of Education controls student quotas of all universities and colleges, both national and private, in order to prevent over-production of manpower in respective sectors.

Incidentally, there are two kinds of student quotas, namely, admission quotas and graduation quotas for each department of the institution. The ratio between the latter and the former is 100:130. This means that 30% of freshmen should drop out by their graduation.

Even though this system has some merits, it has proven that there are many unexpected problems, administratively and emotionally. Upon the recommendation of the Presidential Commission for Education Reform, therefore, the Government has announced that there will be only an admission quota system from next academic year. It means there will be no more graduation quota system.

The size of student quotas has great financial impact. To almost all private colleges and universities, the total number of students, practically, means the total budget of the institution. Up to 1960, considerable numbers of "extra-students" beyond the quota were admitted with the president's decision. In other words, there existed some flexibility in admissions. But after the Military Revolution in 1961, the quota system had been adopted very strictly until now. In case of its violation, the president had to take proper responsibility. Sometimes, he had to resign.

In a democratic society, it is almost impossible and not desirable to make perfect manpower planning. In fact, there is always some over-production in one sector, and shortage in another. However, there should be overall planning and preparation for future manpower needs. At present, Korea needs many scientists and engineers for her industrialization on one hand, and should reduce much "white collar job" training on the other. The ratio between liberal arts-humanity students and natural sciences and technologies is, at present roughly, 60:40. Considering manpower-needs in the coming decades, the ratio should be reversed, namely, 40:60.

It is also advisable that national universities should concentrate on natural sciences and technologies which require large amounts of money for expensive facilities and equipment ; whereas private universities may contribute through humanities and other disciplines which can accomplish great success with ideas and books.

Student quotas are filled through the entrance-examination. At present, it is composed of two parts; one is the national examination, the other is the respective university examination. The score of the former occupies the absolute weight, whereas the latter is only nominal. Eventually, however, each institution should develop its own admission system. It might take several months in screening promising students through various means, such as aptitude tests, interviews, extra-curricular activities records during high school days. Besides, each institution should develop its strong fields, and should supplement its weak fields through inter-university cooperation. No university can be best in all fields, and should not. This kind of change will taken place only under the full autonomy system.

In the United States, the amount of tuition and fees vary from state to state, and from one school to another. Here we find the free market system of capitalism even in academia. Recently, there are strong opinions among Korean private universities and colleges that

governmental control over tuition and fees should be removed as soon as possible for their autonomous charge with self-constraint.

II. Role Differentiation of Universities and Colleges

The characteristic of Korean higher education is the fact that there are very little differences among colleges and universities in terms of their administrative organizations, curricula, and personnel. The main reason for this kind of uniformity is a highly centralized educational system under the Ministry of Education. With the exception of Seoul National University, which has its own ordinance, all national universities are under the same ordinance. In other words, each national institution does not have its own "charter" yet.

Private institutions are under the control of the Private School Law which is restrictive rather than autonomous. Therefore, there are not so many differences between national universities and private ones. Regardless of their specialities and liabilities, most institutions are wasting their energy in copying the leading institutions.

Some leading universities are already well qualified for graduate studies in terms of their faculties and facilities. These institutions, like Harvard University in the United States, should concentrate on graduate studies rather than undergraduate. Seoul National University, the best and largest in Korea, for example, is still emphasizing undergraduate education at the expense of graduate programs.

The universities and colleges without graduate programs tend to be evaluated as inferior institutions. Because of this misconception, graduate programs are opened without proper preparations in terms of faculty, curricula, and facilities. This brings automatically poor quality of graduate education. Certainly, this kind of graduate program also provides a negative effect upon the undergraduate programs of these institutions. In other words, they are not assets, but liabilities for the institutions.

Some well-known universities and colleges in the United States, for example, are very proud of their undergraduate programs. They are not interested in graduate programs. Because they know the importance of human general education and/or professional education at this level. Those colleges with no graduate program are not necessarily poor colleges.

There are 119 junior colleges of various disciplines throughout Korea. The objectives are quite similar to those in Japan and the United States. In spite of their various merits, however, junior colleges here in Korea are not popular among the public and students themselves. Being a-two-year-program institution, it is called a "quasi" or "half" college. In fact, many junior colleges, mostly private, are anxious to promote to senior or "full" colleges.

Their curricula, generally speaking, do not reflect their role differentations and are almost similar to those of freshmen and sophomore of senior colleges. In order to survive and succeed with their specific role differentiation, junior colleges should develop their curricula, and respective academic facilities which would meet the needs and demands of the society. No doubt, it is quite necessary to adjust their programs to the ever-changing social and local needs.

Fortunately, there are already several junior colleges which have succeeded in their role by producing able graduates with up-to-date skills and knowledges. It is quite natural that their graduates have very little difficulties in finding jobs in their respective fields. Those students in these colleges do not feel any kind of inferiority complex.

It is not advisable, however, that all junior colleges should be professional or vocational institutions. In order to meet the needs of certain populations, especially for women, who would rather have sound general education programs for their level of self-realization, it is quite necessary to run "general" instead of vocational junior colleges. Needless to say, dual programs, if necessary, are permissible in the same institutions.

III. The Pursuit of Excellence

Recognizing the value of education for social and economic advancement as well as for self-realization, the aspiration for educational opportunities among Koreans has brought the unbelievable expansion of school population in all levels of education. Especially, higher education has shown revolutionary increment within a relatively short period of time in order to meet the acute demands of high level manpower in Korean society with her economic and social development.

Korean higher education has already reached the "mass education" stage. This rapid change has created various liabilities as well as many assets for Korean society in general, higher education in particular.

The college degree has become a "passport" not only to a white-collar occupation but also to "successful" marriage. There is strong pressure for both parents and youth for higher education, regardless of academic ability, interest, aptitude of the students, and financial condition of some parents to support advanced learning.

Needless to say, sheer expansion of higher education without quality control will bring not only national disaster but also educational failure.

The Korean Ministry of Education, therefore, has taken several measures in order to constrain the misled educational over-aspiration. The Preliminary Examination for College Entrance (now the Achievement

Test for College Entrance) was given to eliminate those students who are not qualified for the collegiate work. And every strict quota policy of the Ministry of Education has been a checking force for many years.

There are, partly because of the quota system, still many youngsters who failed in the highly competitive entrance-examination, but continue their preparation for the next examination as "repeaters". Some, therefore, advocate that the door for higher education institutions should be open more widely in order to avoid the frustrations of repeaters. There is, however, general consensus among Korean people that from now on "the pursuit of excellence" is much more important than the "expansion of educational opportunity" in higher education. Thus comes policy change for the quality control of higher learning. Preferably, it should be done, not by governmental order or outside intervention, but through autonomous decisions within the institution. The Ministry of Education should delegate some of its powers to the colleges and universities for more efficient and flexible administration and management than the uniform operation throughout the nation.

IV. Delegation of Power : Decentralization

At present, Korean educational administration is a highly centralized one which hinders creative, democratic, and idiosyncratic education. Many minor administrative matters should be delegated to the board of education of each province for common education and to the colleges and universities for higher education. The Ministry of Education, instead, should pay more attention to the long-range educational plan and policy development. In the future, it should minimize its controlling, direction, and inspecting power over higher education institutions in order to provide more autonomous administration to the colleges and universities. Otherwise, creative work cannot be expected.

Strangely enough, higher education institutions throughout the nation are almost identical in spite of their different mission, locality, establishment, etc. In other words, there are very few idiosyncracies of the institutions. One of the main reasons for this phenomenon is the centralized system of education which binds all institutions with the same laws and regulations regardless of their differences.

On the other hand, it is imperative to mention that many people including educational leaders still do not realize the importance of differential development of each institution. Instead, they are anxious to copy the so-called "leading" universities which are on the quite different conditions in terms of their history, faculty, students, finance, etc.

V. Faculty Participation in Autonomy

If and when the autonomy of higher education prevails, the faculty should take an active role in policy making, not only in academic affairs, but also in other areas. Very often, the most important policies are decided by the few administrators and bureaucrats who are not familiar with the nature of higher education. It is quite advisable that professors should be represented as members of the Board of Trustees of the private institutions. In the future, the university, national and private alike, should have a faculty senate through which professors can express their professional opinions for the betterment of university administration and management.

VI. Faculty Improvement

No one doubts that the faculty play the most vital role in university education. In order to recruit the best qualified teaching staff, Korean higher education institutions, national and private, have adopted the "open recruiting system." Through this system many well qualified scholars have found their jobs. On the school side, considerable faculty improvement has taken place since its adoption.

It is also important to train faculty on the job. At present, all teaching staff of different ranks are under the contract system for certain years, respectively. In other words, theoretically, there is no permanent staff. Because of this system professors have to keep their academic standards as high as possible in order to renew their contracts.

This system, however, has some defects for senior professors who have already proved their quality. It is recommendable that the tenure system be adopted for associate and full professors in order to eliminate unnecessary mental strain for them. Considering the fact that very few professors have been eliminated from teaching positions so far, there is very little sense to continue the contract system.

We envy the sabbatical leave system of the United States. We may adopt this system with minor changes, namely not every 7 years, but every 10 years, for example.

VII. Improvement of Instruction

In order to improve quality of instruction, professors' burden should be reduced considerably. For instance, teacher-student ratio at national institutions should be 1:15-20; whereas private university 1:30; and teaching load should be 6 hours per week. No doubt, as far as teaching load is concerned; the less, the better.

The dream of a research professorship or chaired professorship has already been materialized in some Korean universities. It is quite probable that other institutions will follow this system in the near future.

VIII. Securing More Finance and Its Effective Management

In order to improve the quality of higher education, vast amounts of finance must be secured. And, there should be various sources for it. It is a pity that at present tuition and fees from the students are the only source for most private colleges and universities. There sould be considerable amount of governmental subsidies for them as the case is in many advanced countries. Justification for the subsidies is very simple, because private institutions are rendering "public" service through education.

It is also highly recommandable to create a university development fund to provide the necessary money with nominal interest to the colleges and universities for their various improvements. This fund may be supported by the Government, or strictly by private sources.

In the last few years, fairly large amounts of donations, from both individuals and corporations, are given to higher education institutions, with or without conditions. For those donations, it is quite reasonable to exempt taxes. If so, there will be, in the future, a considerable amount of donations from industry, alumni associations, and other sources.

A mental climate of donations for higher learning should be stimulated among the Korean public. Along with it, university adminisitrators, both national and private, should put more time and efforts into fund raising activities from now on.

IX. Inter-institutional Cooperation

Recognizing the need for inter-institutional cooperation, Korean universities have developed a consortium system among graduate schools located within commuting distance. For example, Yonsei University, Ewha Womans University, and Sukang University made consortium many years ago; and Chungang University, Sungjun University, and Inha University another consortium recently.

In general, however, there has been very few cooperative entities in Korean higher education. Considering the shortages, for example, of specialists, high cost research equipments, rare historical documents, etc., it is imperative for us to cultivate a cooperative institutional climate in Korean academia.

Let us examine the need for inter-institutional cooperation in inter-library loan system. Most universities are proud of their "grand" library buildings. But it is rather a pity to find that there are great shortages of books and journals needed for creative studies and research. Even in the rich American universities, the inter-library loan system is very popular and active in order to overcome their shortage of reading materials. Of course, inter-loan systems are not limited only to printed materials, but also to various audio-visual aids, etc. Needless to say, Korean universities should

learn this kind of inter-institutional cooperation without hesitation.

X. Students Activities and Their Welfare

No university administrator can ignore the students' welfare and their demands. As all of us know well, Korean campuses are not totally quiet yet. Some issues are political and social in nature, and some are internal problems such as the regulations of student council, welfare facilities, and a "free" university press, etc.

As to political and social matters, there is very little room for university presidents and professors to settle those problems. Fortunately, most students are not so much interested in those matters except very small minority groups who are radical and politically oriented.

As to internal matters, however, the president and faculties can find some ways and means to solve student complaints. Usually, their demands are decent, and therefore, workable in some way or another. In some cases, however, very serious situations may arise. Very often, lack of understanding or misunderstanding on certain matters was the cause of a demonstration, strike, and many other actions. In such a case, kindly explanation or friendly dialogue between two parties can solve those problems rather easily.

Incidentally, the administrators should pay much more attention to campus communication in order to avoid unnecessary misunderstanding or lack of information among all collegians. The bigger the institution, the more difficult to communicate. Therefore, multiple measures for inter-communications should be made.

The activities of the student council should be encouraged with friendly faculty guidance. Through these experiences, they will learn the demarcations of their demands. This is, in fact, one of the most valuable educations for the students.

XI. Closing Remarks

A university is no longer a "closed" ivory tower for the privileged few elites. It is rather an "open" intellectual community for common citizens, young and old. Its function as the center for continuing education or for life-long education will become stronger and stronger in the decades to come.

This trend, however, does not mean that the quality of higher education would go down automatically. Rather, a university should broaden its horizons to serve multiple needs of its various "constituents." No universities are alike, and they should not be. If so, they can not meet their various needs. This is the reason why autonomy is essential in a democratic or pluralistic society. Moreover, being a university, the center for academic freedom, critical thinking and intellectual interests should be encouraged in order to serve the "truth." A free, inquiring mind does not flourish

under a uniform, directive mental climate.

The Presidential Commission for Education Reform has proposed quite many strategic educational reform policies for all levels of education. The commission's main principles for reform have been; 1) Multiplicity instead of uniformity, 2) Open-end policy instead of closed end, 3) Flexibility rather than rigidity.

It was found that there are always conflicting opinions or interests on every policy. For example, quantity vs. quality; pure research vs. applied research; equity vs. competitionl; higher education vs. common education; senior college vs. junior college; national universities vs. private ones; metropolitan institutions vs. rural institutions; and so on.

Many splendid "reforms" in the past failed, because they were introduced without proper understanding or preparation. Autonomy which we have advocated so much needs considerable preparation. Autonomy without self-evalution, self-control, or self-renewal may bring chaos, or even disaster. Certainly, we should treasure this precious autonomy with a great sense of responsibility and self-respect.

One of the most important elements for the success of educational reform is the mentality change of the common people, especially parents. We should, however, be well aware that mentality change does not occur in a short period of time. Rather it is a long process. Radical changes are, therefore, doomed to fail.

Finally, it is hoped that institutions like Korean Council for University Education should take an active leadership for university autonomy in its true sense. Thank you.

ORGANIZATION AND ADMINISTRATION OF UNIVERSITIES IN JAPAN

Soichi Iijima
President, Nagoya University

Universities in Japan are classified into national, public and private universities, according to the type of founding bodies. National universities are founded by the state, public universities by local public bodies and private universities by school juridical persons. Only one exceptional case is the University of the Air, which has been founded by a juridical person having a special status and financed by the state. In 1986 we have 95 national, 36 public and 334 private universities and the number of students of each type of university is about 370,000, and 47,000 and 1,300,000.

National universities, beginning with the University of Tokyo established in 1877 and the Kyoto University established in 1897, have made a considerable contribution in training of talented manpower to consitute the driving forces of the development of the country, and in advancing scientific research.

Public universities, though their number is not so large, have been contributing particularly to the securing of opportunities of proceeding to universities, and to teaching and research reflecting respective local conditions.

Private universities, based upon their own founding spirit, are conducting a variety of teaching and research activities with unique characteristics which are hardly expectable from national and public universities, including religeous education, and also contributing to the popularization and development of higher education in response to the demand of the people for higher education.

In case a local public body or a school juridical person wishes to establish a university, authorization by the Minister of Education, Science and Culture must first be obtained. Prior to his granting of authorization, the Minister must inquire the University Chartering Council. The Council then deliberates the matter based on the standards of establishment as laid down in an Ordinance of the Ministry of Education, Science and Culture, and recommends to the Minister whether he should or should not give authorization.

In the case of private universities, the Minister of Education, Science and Culture must also inquire the Private University Council, which deliberates, inter alia, whether the educational foundation wishing to establish the institution in question has sufficient managerial ability to keep operating the institution.

For the sake of financing national universities, a scheme of special account called a Special Account for National Education

Establishments has been established. This account is independent from the General Account of the Goverment. The revenue of the Special Account for National Education Establishments consists of the transfer from the General Account (roughly 100,000 billion yen per year), self-earning income (school fee, attached hospital income and others), and loans from the financial investments of the government. In 1986 the total amount of revenue of the Special Account for National Educational Establishments is 167,550 billion yen and the transfer from the General Accont forms 64.5% of the total revenue.

Public universities are financed partly by the subsidy from the national treasury but mostly by the fund from the respective local public bodies which established the institutions in question.

As to private universities, it is the principle that their financing be self-supporting. In 1985 total assets of 314 school juridical persons which establish universities are 660,680 billion yen and their liabilities are about 206,280 billion yen. Their total fund amounts 477,280 billion yen and consumptive revenue and expenditure is minus 228 million yen as a whole. The ratio of liabilities becomes 45.4%. As to revenue and expenditure in consumption of private universities the largest part of the revenue depends upon contributions of students including school fee, which form 50.7% of the total income.

In regard to private universities current expenses subsidies are being granted by the state in order mainly to maintain and improve their educational conditions and alleviate financial burden on students in their continuation of study. This national subsidy for private universities is enforced according to a law, which has been enacted in 1975 and the law aims originally to be able to subsidize to cover until the half of current expenses of the private universities. However, due to recent severe financial situation of the government, the total amount of the subsidy has been obligated to be suppressed and at the present time the ratio of the national subsidy against the total current expenses of the private universities remains a little over 20%. The remaining nearly 80% depends upon self-financed resources such as the fee from students, voluntary contributions and activity incomes etc.

As mentioned above, one of the characteristics of Japanese higher education could be found in it, that the private sector is predominant, and it forms about 80% of the higher education in number of students and also in the expenditure for the higher education. This is, however, rather a common tendency in Asian countries such as Korea, Taiwan, Phillipine and others and it makes a clear contrast to most of European countries. In Thailand universities were only national or public in the past, but since 1969 private universities and colleges have been acknowledged and then rapidly developed, so that in 1983 40% of the enrollment of the higher education are occupied by private institutions.

One of problems concerning such a tendency is that governmental or public financial support to the higher education is rather limited. For instance in the case of Japan financial expenditure supported by government and local public bodies forms about 0.9% of G.N.P., so the figure is definitively small in comparison with 1.5% in U.S.A., 1.9% in United Kingdom and 1.8% in West Germany.

On the other hand the financial burden of students is inevitably heavy in countries, where the private sector is predominant in higher education system. In Japan the payment by students forms about 30.6% of the total higher educational expenditure, in spite of the relatively cheap school fee at the national universities, which however has been raised about 7 times during these 10 years.

In securing equal opportunity of higher education and in fostering manpower useful to the state and society, it is of course very important to expand scholarship program and resolve such a situation. Based upon such a consideration, an improvement was made in 1984 in Japan to the scholarship programmes of the Japan Scholarship Foundation, which is a juridical person having a special status under direct supervision of the Ministry of Education, Science and Culture. Under this improvement measure, while the conventional interest-free loan programme continues to exist as the nucleus of the scholarship programmes of the Foundation, a programme of loan with interest was created in order to secure quantative expansion. As a result, the number of students benefiting from the scholarship from the loan from the Foundation increased by 11,000 as compared to the number in the preceding year, but it is still only about 272,000 including 25,000 students of graduate school. In 1985 total amount of the interest-fee loan is 7,480 billion yen (2,700 billion yen for national and public university students, 4,780 billion yen for private university students), and the loan with interest 1,410 billion yen(for public and national universities 360 billion yen, for private universities 105 billion yen). The figure can not be considered to be sufficient.

In order that academic freedom is secured and that universities can fulfill to the fullest extent of their teaching and research functions, autonomy of universities is essential. In this point of view, it has been prescribed that all the universities must have "faculty meetings"(kyojyu-kai) which are to deliberate important matters in Article 59, paragraph 1 of the School Education law in Japan.

In principle, faculty meetings are to be composed of professors. However, it has been allowed legally that membership of the councils may include associate professors, lecturers and also assistants. In fact, many universities have included other teaching staffs as well as professors in their faculty meetings.

As to the matters for deliberation by faculty meetings, the Law only says "important matters". Generally such matters include : a) organization of the faculty such as departments, courses, and

establishment and placements of attached facilities, b) organization of curricula, c) admission and withdrawal, examination, graduation etc. of students, d) welfare and guidance of students, and e) personnel affairs of teaching staff.

Faculty meetings are established normally on a faculty basis. Accordinglly, in order to deliberate matters affecting the entire univeristy, "a senate"(Hyogi-kai) or something like that composed of the president, deans and of some members elected from each faculty, is established, especially in national universities which have a number of faculties. In this case the senate is regarded as the central administrative structure of the university and a determination and declaration of intention as university are deliberated and decided at the senate. Cooperations as well as conciliation between faculties and the leadership of the president are secrets of successful management of the senate.

Recently, some of national universities (most of them are newly established) are endeavouring to meet the demand from society to the respective universities, by establishing "an advisory board"(Sanyo-kai) comprizing wise men from outside the university, or by commissioning advisors, to invite opinions from wider world concerning the operation of the university.

As to private universities, there are school juridical persons, which are the bodies responsible for the operation of the respective universities. The construction of the school juridical person is prescribed in the Private School Law and it is composed of a board of directors (more than 5 persons), a council (the number of councilors must be more than 2 times of the number of the member of the board of directors) and 2 auditors. The chairman of the board of directors holds sometimes the president of the university, but mostly the both are separated. The relationship between the board of directors of the school juridical person and the faculty meetings of the university makes one of critical points in the administration of private universities.

There is the same delicate relationship between national universities and the Ministrium of Education, Science and Culture, which is the founder and operator of national universities. National universities are under the regulation of the National School Establishments Law and their staffs are public service employers, although for teaching staffs a special Law is applied. Finances are carried out also under the control of the Accounts Law of the Government. So the autonomy of the national universities in Japan is limited by the legal regulation as a sort of government body and is influenced by operations of the Ministry of Education, Science and Culture.

Of course, national universities have played a significant role in the proper national distributions of universities and in locally securing opportunities of proceeding to universities. Also assigned to national universities have been an important task considered

difficult to expect from private universities, including planned training of such manpower as physicians and teachers, and promotion of significant fundamental research in such fields as energy and space science. In these matters national policies have been realized effectively through guidances and advices of the Ministry of Education, Science and Culture to national universities. However, it can not be denied that spontaneous activities and free development of universities are sometimes suppressed by the control of the government.

In Reports of National Council for Educational Reform, an expansion of the autonomy and the strengthening of the self-supporting capacity of universities are recommended. Universities have been considered to be given much more free hands to organize themselves adapting to social advances and each university has been expected to be characteristic.

To include the diversity of universities, the University Establishment Standards as laid down in an Ordinance of the Ministry of Education, Science and Culture must be reexamined in the direction to loosen the dicipline. In the case of the national universities, many of administrative competances should be transfered from the government to universities and the national universities may be permited to keep some of financial independencies in which framework they could introduce money from various sources other than the government.

On the other hand universities have duty to recognize self-government properly including faithfull efforts of accreditation. Reactivation of the Japanese University Accreditation Association should be also one necessary project.

For high-level policies to establish and to realize, foundation of a new national council named "University Council" have been also recommended. This new council is expected to play a leading role for university reform in future in Japan.

TOPIC II

SOCIAL FUNCTIONS OF UNIVERSITY

Changing Structure of Japanese Higher Education

Social Service Functions of the University: Focusing on the Opening of the University

CHANGING STRUCTURE OF JAPANESE HIGHER EDUCATION

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I. Boom of College Expansion

Now in Japan another epoch of higher education expansion has come. In the late 1970s the requests filed for permission to establish new colleges and universities numbered only a few per year. However, in 1985 they numbered twenty-four, and in 1986 twenty-six. Many other existing universities and colleges are requesting for permission of establishing new faculty or department. It, however, shows peculiar lack of the kind of enthusiasm usually found with any boom; instead, it is accompanied by a vague sense of uncertainty and anxiety.

Similar boom of expansion took place in the late 1960s. In 1966, 46 private colleges and universities were established and in the following year, twenty-seven. At that time, the expansion was brought about primarily by the acute increase in the size of total population at the age of eighteen. As indicated in the attached figure, in 1966 the eighteen-year-olds reached the yet-unsurmounted level of 2.49 million. It was in order to cater to this anticipated increase in the demand for college education that numerous private colleges and universities were newly established.

The background is not different this time. The size of the population at age eighteen has started again increasing rapidly. It is estimated that the size will amount in 1992 - when the trend will reach the peak - to 2.07 million.

But the environment that surrounds higher education has changed since the last time. In the last expansion period of the 1960s, the rate of enrollment in colleges and universities to the age group had not yet reached the level of twenty percent, and it was generally expected that the enrollment rate would continue to rise. Moreover, it had been estimated that, after reaching the peak, the size of eligible population would decline, but it would then level off at the level of 1.60 million and start increasing again. In so far as the number of potential entrants is concerned, there was little concern for the newly established institutions. At that period, one might add that the Japanese economy at that period was in the midst of the accelerated economic growth. The prospect for future development of higher education was indeed bright and open.

However, it is not so this time. Since the Oil-Shock of 1973, the Japanese economy has been trailing on a path of sluggish growth under mounting pressures for restructuring. And probably reflecting the slowed economy, the rate of enrollment levelled off around the

level of thirty-six percent since mid-1970s. Furthermore, there is no definite prospect for the 8 years old population, after peaking at the year 1992, to start increasing again. It was reported recently that the number of new-born babiles in 1986 did not even reach the 1.40 million-mark.

The grim prospect is indicated in the Governments' Higher Education Plan of 1984. In order to maintain the present level of enrollment until the peak year of 1992, the Plan envisages the need to increase the sitting capacity. But only half of the necessary increase is set by the Plan as the goal for creating new and permanent sitting capacity - the remaining half is expected to be catered by temporary increases. The scheme reflects the concern that, if the whole increase was made permament, a sizable over-capacity (assuming that there will be no increase in enrollment rate anymore) will be created in the post-peak period, and it will potentially result in a number of cases of "failures" among colleges and universities that could not attract sufficient number of students. Such concern is also shared among school administrators and scholars in the field of education, and particularly among those directly responsible for private institutions.

II. The Last Chance?

In spite of the dim prospect and grave concerns, new institutions and departments have been advancing at such a high pace that the goals for increases in sitting capacity will be achieved as early as 1988, mainly through establishment and expansion of private institutions.

There can be several reasons why the private sector of higher education is so eager for expansion. First, the firm control by the Ministry of Education on enrollment has been somewhat relaxed and this would make the last chance for private institutions to expand in the foreseeable future. At the same time, many municipalities that have completed series of public project - city-hall, auditorium, museum, athletic field or gymnasium - are now very enthusiastic among municipalities in attracting private colleges offering financial incentives ranging from free land for campus to the building cost, and to partial subsidy of current cost.

The third most critical factor, however, should be the "calculation" made by the colleges and universities themselves. Even if the costs for land and building were subsidized from municipalities, the management of school itself should naturally remain as the responsibility of college management. Without a sound "calculation" that they would be able to attract sufficient number of students - in the post-peak as well as in the peak years - so that both the costs of initial investment are readily recovered, the private institutions should not have sought actively for establishment or expansion. There is no doubt that after 1992 the market of higher education will diminish rapidly, leading to a fierce competition among institutions. Those expanding institutions must be confident that

they will win and survive in the competition.

Indeed, the anticipation of heated competition in the post-peak period underlying the current boom is indicated by the characteristics of newly established institutions, faculties or deparments. First, the expansion is concentrated on four particular geographical blocks, i.e., South Kantou including Tokyo, Kinki, Toukai and Chuugoku. These were the areas with which the Higher Education Plan in an effort to promote more even distribution of the opportunities of higher education, tried to limit the increase in permanent sitting capacity. As it turned out, it was only in these areas that the goals of increase in sitting capacity were achieved or even surpassed by a considerable margin. It must have been a natural choice for private institutions. For it is in these areas where, not only the increase in the eighteen-year-old population will concentrate, but also the anticipated decline in the post-peak period will be of relatively minor degrees. The expansion of private colleges has thus been most salient in the areas where the market is most promising.

Second, it should be noted that many of the new institutions are established by the successful proprietary schools and Special Training Schools(Senshuu Gakko). That is, expansion has taken place in the institutions known for active and progressive management. Third, it also deserves attention that new faculties and departments frequently bear titles related to such new and attractive areas as international studies, information sciences and inter-disciplinary studies. The current expansion boom - proceeding with full awareness about the uncertainties in the future - does appear to signify that the emerging institutions are posing a serious challenge to the existing established institutions. The rise of calculating and confident challengers will become a significant factor of change in the market of higher education after 1982.

III. The Growth of Special Training Schools(Senshuu Gakko)

The rapid growth of Special Training Schools(Senshuu Gakko) is another significant factor of change in the past decade. While the number of entrants and the enrollment rate in colleges and universities stagnated, those for Special Training School have been on a steady rise: in 1986 they enrolled new entrants of the size accounting for 11.1 percent of the total eighteen-year-old, which compares even favorably to 12.0 percent for junior colleges.

Given the lenient standards for establishment, the individual Speicial Training Schools are far more diversified than colleges and universities. Some of them are marginal or, run only after profit, even deceptive to students. Nevertheless, the quality of training in these schools, as a whole, is steadily improving. The Special Training School have thus established its status as the third sector of higher education after colleges and universities.

What contributed to the growth of Special Training Schools is the past higher education policy that laid strict control on establishment and expansion of colleges and universities in large urban areas. Those areas have seen, despite the stagnation at the national level, steady increases in the size of population at age eighteen. Therefore the higher education policy functioned as a "lid on pressure cooker," and as a result, the male enrollment rate of collelge, for example in Tokyo, declined from 66 percent in 1975 to 48 percent in 1984. And main part of the margin of deline was taken up by the Special Training Schools, which tripled enrollment rate from 4 percent in 1977 to 11 percent in 1984.

Since the eighteen-year-old population keeps increasing in the large urban areas, the expansion of Specialized Training Schools will surely continue. Owing to the relatively lenient standards on required space and other facilities, they can be established easily relative to colleges and universities and flexible enough to adjust to the changes in time and society. The Special Training Schools are thus creating a segment of higher education characterized with innate flexibility and innovativeness. It is certain that this segment will become even more influential in the period of rapid expansion of higher education until 1992; after the post-peak period after 1992, it will constitute a powerful competitor to colleges and universities.

IV. Internationalization and Development of High-Technology

The list of issues that higher education envisages towards the 21st century does not end with the competition over the shrinking pie of eighteen-year-olds after 1992. The economic, social and cultural changes undergoing in Japan - internationalization of economy and society, development of high-technology, transformation of industrial and occupational structure with the growth of the services sector, prolongation of education to life-time - are giving critical impact on higher education and forcing it to make fundamental ajustments. This is an issue of even more critical significance than the competition over the share in a pie; the fate of higher education institutions in the competition for future survival and development will be largely dependent on how they will adapt to these changes.

Take for example the impact of internationalization. Till recently, internationalization had been generally conceived as an issue in the realm of politics and economy, and most remote from education. However, now, it is becoming an urgent problem imposed on education in general and on higher education in particular.

Several years ago, a proposal was made in the Ministry of Education for increasing the number of foreign students in Japan up to 100 thousands. At present the foreign students studying in Japanese higher education institutions number less than 20 thousands; but there is no doubt that Japan, transforming from an economic giant to a technology giant, will attract in the future a greater number of foreign students. Because of the rising Yen, these foreign students

will have to bear the burden of the high costs, and will naturally demand the corresponding quality of education. Even if Japanese students were content with the current status of colleges where "education is absent," foreign students will be unsatisfied. The increasing foreign students will become rigorous critics of the colleges. Indications of such reaction have already started to appear.

On the other hand, the number of Japanese students studying abroad is also increasing. Provided with the rising exchange rate the differences between Japan and other countries in cost of higher education including living expenses have significantly shrunk, or even reversed. The barriers that have so far obstructed studying abroad - poor command in foreign language and the difficulty in securing employment opportunity after graduation - are diminishing also. Younger generation speak far better English; the Japanese businesses going abroad have become so active in trying to recruit the Japanese graduates from foreign colleges that there are now even commercial recruiment services catering to the need. For the Japanese youth, the opportunity of higher education is not limited to the Japanese colleges.

Moreover, attracted to the wealthy Japanese youth, colleges and universities from North America and Europe have started actively recruiting the Japanese students. Particularly the American colleges, facing declining size of eligible population at Rome that had come earlier than in Japan, have been very active in recruiting students and expanding to overseas. It has been publicized recently that representatives from a few elite institutions of the United States - among them were Harvard and M.I.T. - visited Japan with proposals of establishing their branch campuses in Japan. The trend of internationlization is not only pressing for more open Japanese economy, but also urging the Japanese education to be opened.

The technological innovations, taking the forms of emergence of high-technology and the expansion of the services sector, and the accompanying transformation of industrial and occupational structures constitute still other significant factor of change for higher education.

In the beginning of the 1960s when the rapid economic growth started, the need of reorganization of higher education was advocated in order to accommodate the required changes in industrial and occupational structure, and subsequently manpower plans were laid out providing the guidelines for expansion of science and engineering departments. But, this time - despite the advancing structural changes of the magintude that probably exceeds that of the 1960s - few argues for innovations in higher education strictly from the stand-point of adaptation to industrial and occupational changes. Why is the difference?

The first reason would be the large sitting capacity in the science and engineering deparments already accomplished through the

expansion plans since mid-1960s. The share of the three types of science-related faculties - Engineering Science, and Agriculture - in total enrolment increased from 23 percent in 1960 to 27 percent in 1985. The number of scientists and engineers produced by colleges every year, relative to the size of total population, has reached at one of the highest levels in the world.

Second, the generally high quality of education in Japan up to the secondary level, and the low degree of specialization in undergraduate education at the college level, corroborated together in producing college graduates endowed relatively strong basic knowledges and the ability to adapt to new environments. In fact, the most common complaints heard about the current college graduates are not the ones about their lack in specialized skills, but the ones related to the decline in basic academic abilities. In Europe, specialization in education starting at too early stages of education or developed to exceeding extent have been criticized for its demerits; in contrast, the positive side of the Japanese education may be its "unintentional" contribution in fostering basic abilities for adjustment.

Third, Japanese higher education has nonetheless managed to respond to the demand for manpower with highly specialized and particularlized knowledges and skills, through development of the graduate level education on the one hand and, on the other, through expansion of professional and technical courses in the Special Training Schools.

Because of these three factors, for last three decades, the Japanese higher education system has succeeded - at the same time going through diversification and expansion by comprising Higher Technical Schools (Koto Senmon Gakko) and Special Training Schools in addition to the colleges and universities - in maintaining the elasticity and flexibility for adapting to the structural changes in industury and occupation.

It is, however, dubious that such a mechanism of adjustment and adaptation would keep functioning in the future. Since the low degree of specialization and the lack of commitment to practical trainings, particularly in the humanities and social sciences courses at the undergraduate level, are unintended consequences of the present system, it is not unlikely that once the basic education up to the secondary level starts declining - a trend that has already appearing - the decline of academic ability among college graduates will immediately follow. The demands for college graduates that have obtained highly speicialized skills and knowledges, particularly in newer occupations, will surely rise; and it is improbable that the graduate schools and Special Training Schools, with their present size and the levels of education and training, will have sufficient ability to cater to the needs. If there would be no substantial reforms especially in the quality of instruction, it is likely that Japan will see in the future increased numbers of Japanese students in overseas or the emergence of new types of education and training enterprises as powerful contenders to existing colleges and schools.

V. Adults as New Clients

The anticipated social and economic changes have also a close relation with the salient trend towards life-long education and the arrival of the learning society.

In the modern society where knowledges and skills advance at rapid paces, it is becoming increasingly difficult even in such high level professions as doctors and engineers to concentrate necessary education and training on relatively early stages of life, and then spend the rest of occupational life relying upon the accumulated "human capital." This is one of the significant factors that lie behind the world-wide trend towards greater emphasis upon non-specialized and highly general education at the undergraduate level. In the emerging model of life-long education, the scope of "regular" school education taking place at earlier stages of life will be limited as far as possible to basic and general education; more specialized and particular knowledges and skills are expected to be obtained as the need arises in the course of working life. Educational changes in various countries appear to be directed to such a pattern.

A significant issue in the life-long education model is the agent of occupational and professional education for adults. It is widely recognized that the Japanese business enterprises have traditionally played a significant role in this aspect through their in-house training and education programs. But the rapid transformation of industrial and occupational structures, as well as the rising mobility of the work-force, will make it increasingly unrealistic to depend solely upon the education and training undertaken by individual enterprises. To an increasing extent, the agent of training and education for adults will have to be sought outside the programs undertaken by individual enterprises.

To fill in this widening gap is a role expected for higher education. At present, there are particularly strong voices demanding graduate education to be opened to adult learners. Most universities, however, lack the organization to respond to the educational demands in the age of life-long education. Moreover, they show little interest even in moving to that direction.

The Japanese colleges, in its history, have focused exclusively upon fresh graduates from high school. Consequently its academic institution and organization - curriculum, organization of class, systems of admission and graduation - are designed primarily to suit the needs of youths studying full-time. To the colleges bound with such institutional settings, the adult students - who are already employed and therefore carrying various restrictions on time and other factors, and who demand practical education and training directly related to actual work - would consititute a complete alien "clientele." In order to play significant roles in adult education, the colleges will have to make fundamental changes in their

organization, or create a completely new sub-system for this purpose.

This pases a significant challenge to the existing colleges and universities, and if they were unable to undergo necessary transformations to respond to this challenge, it would imply a still other opportunity lost to the new educational enterprises outside the higher education system.

VI. Competition for Survival

The United States saw decline in the eligible population in the beginning of the 1970s,; the American colleges have since underwent fierce competition for survival. The competition have been fought not only over the share in the shrinking pie of traditionally eligible population, but also over the growing body of potential adult learners.

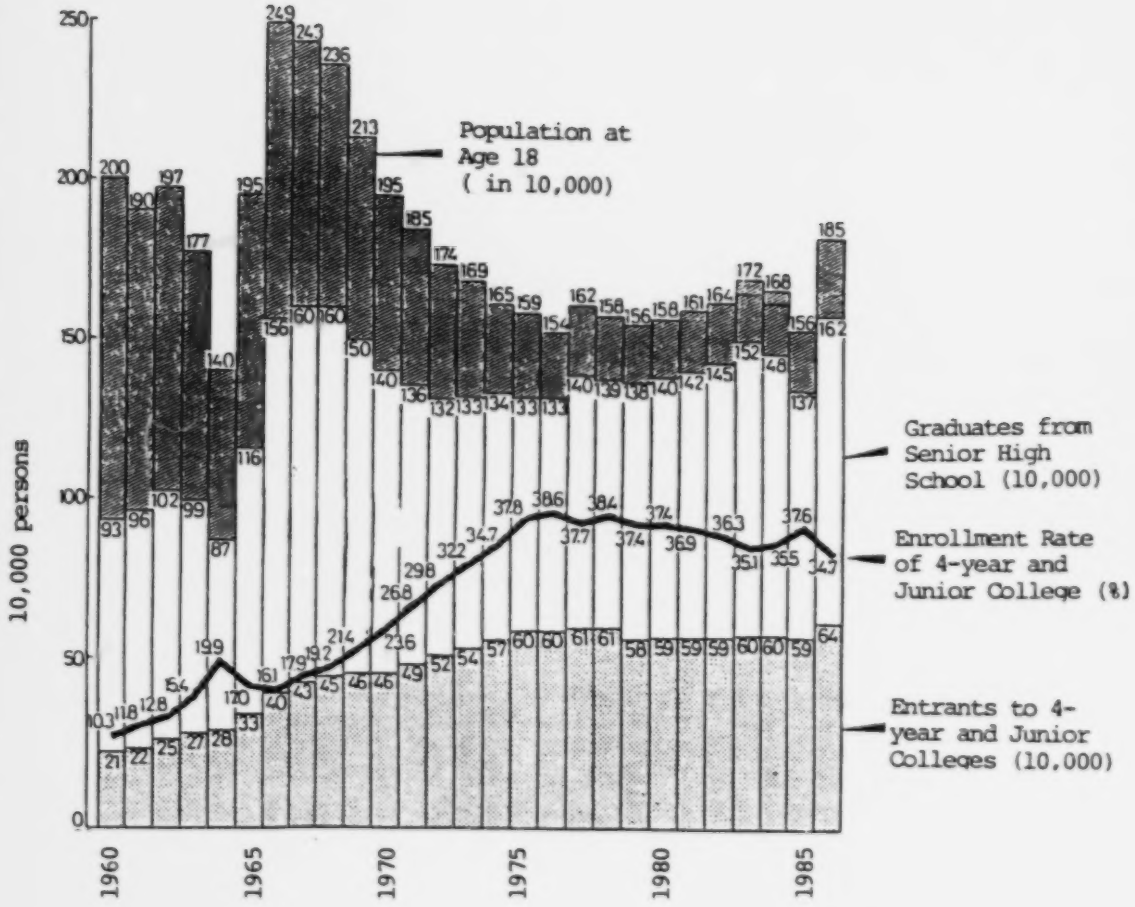
The American higher education is composed of similar segments to those in Japan - colleges, junior colleges and proprietary schools. However, the managerial efforts paid by the American Colleges and junior colleges for their survival are of the magnitudes beyond imagination. It is those efforts and the fierce competition that have given the American higher education the outstanding flexibility in adapting to the changes.

Compared to the case in the United States, the Japanese colleges and universities may appear as if they have been raised in greenhouse. For the forty years in the postwar period, the Japanese colleges and junior colleges have been on the one hand supported by the increase in the number of entrants and, on the other, protected by the higher education policy of the Ministry of Education. Higher education has also been one of the foremost "growth industries," given constantly by the booming economy sufficient nourishments for growth.

The shelter provided in the greenhouse, however, may have to be removed soon. The newly established colleges, faculties and departments appear to have been born from full recognition of the stark future and clear conception of necessary innovations to adapt to the changing environment. But, how about the existing colleges and universities? What are their prospects in reforms - in instruction and academic organization - for future?

Considering that the anticipated changes are of such a magnitude that the Japanese higher education has never experienced, it may be unfair to blame the sluggish reaction of individual institutions. Nonetheless, the anticipated change will surely involve all institutions of higher education including the "elite" uiniversities so proud of their long tradition and high prestige. It will be only after individual colleges and universities have gone through those structural changes that we will see the true diversification of the Japanese higher education system, that has been sought for a long time, to realize.

FIGURE: Changes in Enrollment and other Indicators of Higher Education, 1960-1986



Source: Ministry of Education, Science and Culture

SOCIAL SERVICE FUNCTIONS OF THE UNIVERSITY (FOCUSING ON THE OPENING OF THE UNIVERSITY)

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I. Introduction

The university in the beginning of the nineteenth century was an institution where research and teaching were the main functions to be performed. The founding of the Berlin University completed by Wilhelm won Humboldt in 1809-10 was forerunner of modern universities committed to two dominant concepts: freedom of scientific inquiry and the unity of research and teaching. These two concepts inspired not only the reform of the medieval type of university in Europe but also the creation of the university in the United States and Japan. Homboldt advocated the university idea of "seclusion and freedom" (Einsamkeit and Freiheit); the university must be a secluded area from society, being a community of learning where freedoms of research, teaching, and learning are guaranteed for university people to search for academic truths.(Ref.1) He transformed the idea of the university from a training institution, primarily devoted to the transmission of established knowledge, to the new concept of an institution primarily committed to the pursuit and discovery of new knowledge. When Humboldt put forward the idea of research and training, he meant, above all, freedom from religious orthodoxy, and the notion that scientific knowledge revealed in the past was in fact heretical.(Ref.2) The principle of the unity of research and teaching has had a momentous influence on further university development, as has also the principle of study, which has united professors and students and led to the rejection by professors in academic institutions of the idea that practical training should be their responsibility. It can be said that research and teaching in "seclusion and freedom" were the main functions of the university in the light of Humboldt's idea of the university.

However, these traditional functions of the university were challenged by industrial technology. The academic island called a "university", where professors and students enjoyed research and teaching in seclusion and freedom, could not but be soaked with waves of industrial technology. The gradual expansion of industrial organization following mass production made it necessary to train a great number of highly talented manpower. So the university was compelled to be in a position to put this task into reality. The traditional university trained men of learned professions such as clergymen, teachers, lawyers who had nothing to do with industrial production, but industry and state the made a demand on the university for training engineers, business managers, agricultural specialists, and bankers. The linkage of the university to the economy in industrial society became direct and obvious through the

market for professional manpower and through research activities in the applied sciences. In short, the university has been drawn more and more closely into the industrial economy. A.H. Halsey wrote on universities in relation to the industrial economy as follows:

> A new relationship is now discernible. In general, whereas both Weber and Veblen saw the university as a corporate structure in process of adaptation (Veblen thought betrayal) to industrial society, W.H. Whyte, writing fifty years later had to see it as an integral part of the organization of a technological society. Development in this direction has its origin in the 19th century application of science to industrial process, "the invention of invention", and the slow subsequent development of technological professions in agriculture, chemistry, metallurgy, mechanical and electrical engineering, etc. However, it begins to become clear as a direct relationship of economic organization to higher learning only with escape from the economic depressions of the 1930s and the search for high productivity of the war and the post war years. Both as research organizations and as training establishments, the institutions of higher education in this period have been drawn more closely into the economy either directly or through the state. The exchange of ideas, people, and contracts between university department and research institutes and their counterparts in private industry and government agencies is such as to merge these organizations and to assimilate the lifestyles of their staff.(Ref.3)

Generally, the university in industrial society is demanded to connect teaching and research with production and economy; accordingly, it seems to be no more in a position to perform such traditional functions of the university as purely academic research and teaching. Instead, training of scientific-technological manpower came to be emphasized one of the most important functions. However, the functions of the university should not be limited to the performance of research and teaching for learning's sake and of training manpower for the sake of industry and state. To these functions, social service functions must be added.

After the Second World War, particularly in the 60s, the social service functions of the university came to be regarded as very important and they were thought to be performed for the sake of the public good. Now that the university is a public institution established and managed by public funds in the form of taxes from the community, the performance of its social functions should be taken for granted. In a truly democratic society, it is contradictory that the university education corresponds only to demands of elite classes and enterprises. The social service functions are essentially concerned with enlarging educational opportunities of common perople as well as with promoting their welfare in terms of their human development. Private universities are requested to carry on these functions too, because they are in positions to put service functions into effect as

social institutions. It is recommended that the university functions of research, teaching, and social service be carried on jointly. They are often mutually supportive. Teaching may be enriched if it occurs in an environment of discovery, intellectual excitement, and contact with the real world and its problems. Similarly, research and social service may be enhanced when they are combined with teaching.(Ref.4) It is essential to bridge the gulf between the intellectual community and the surrounding society because if that gulf is permitted to widen, the intellectual community will not get resources and support to make it effective, and the people will not be served by intellect.

The educational policies of most of the industrialized countries are based predominantly on the principle of satisfying social demand for higher education and opening its gate not only to those qualified by traditional criteria (that is, all applicants who have successfully completed general secondary education), but also to students who up to now have been excluded, either formally or in practice, because of their social origin, educational background or age.(Ref.5)

Universities have very favorable conditions for carrying on social service functions in every respect, because they have not only huge and varied equipment and facilities but also highly qualified teaching staffs in various fields of major subjects so that they may be able to undertake continuing education for community adults effectively. In the Republic of Korea, social service functions of the university came to be emphasized from the early 70s, extension courses or continuing educational programs for the community having been established. In the 80s, social service works initiated by university authorities have been more active than before. The representative social service carried on by the university has been continuing education for adults. In general, continuing education has been undertaken under the sponsorship of research institutes with such names as "Social Education", "Lifelong Education", "Social Welfare", "Community Development", and "Social Problems". Nowadays, there are approximately 25 research institutes attached to universities which undertake continuing education in Korea. According to a survey research finding, higher education institutions in Korea offered 268 continuing educational programs for adults in 1983-84, of which the percent of each area of learning was: 41.8 in general education; 33.6 in commercial education; 9.3 in spiritual education; 7.1 technical education; 8.2 in others. (Ref.6)

In the Republic of Korea, social service functions of the university may be categorized into three. The first category is concerned with training manpower for industry and economic growth and producing applied scientific knowledge useful for the advancement of technology as well as for the solution of social problems. The second is concerned with opening up the university for the benefit of community people. Adoption an open admission system, practice of continuing education, and the opening of facilities for community people are necessary to put this service function into effect in the university. The third category is concerned with service activities conducted by university people (professors and students) off campus.

In contemporary society, they are expected to play roles in service for the betterment of society in which they live, with their acquired knowledge and their professional skills.

Professors may do their service work as advisors or counselors for making policy for administrative agencies and industrial organizations or as teachers for adult educational activities sponsored by community organizations. Students may develop their service activities for the development or rural communities and disadvantaged areas of cities. The community service work students perform is very meaningful in terms of giving back to the people what they have learned at the university as well as in terms of having opportunities to connect knowledge acquired at the university with actual practice through field experiences. In the Republic of Korea, the number of professors participating in social service activities as advisors of government agencies, industrial firms, and community organizations has been increasing since the 1960s. A recent research finding shows that the percent of professors working as advisors was 18.1 in the 1960s, 27.1 in the 1970s, and 31.2 in the 1980s. The percent of professors who have done service work as instructors for the courses sponsored by community organizations was 41.0 in the 60s, 51.7 in the 70s, 63.5 in the 80s.(Ref.7)

II. The Opening of the University as a Social Service Function

I would like to focus my discussion on opening the university as a social service function in this paper.

Recently, the opening of the university is being carried on postitively in developed countries in order to promote the performance of its social service function. The opening of the university has great significance in the light of putting the idea of lifelong education into reality. The opening of the university means, in essence, to adopt an open admission system partially or totally in order to enlarge opportunities of working youths and adults for higher education. Open admission means equal access for higher education even for those individuals whose previous academic performance and low social economic status would not ordinarily give them access to higher education institutions.(Ref.8) There seem to be two categories: one category is to undertake formal higher education for adults and the other is to perform non-formal continuing education for them. The characteristics of the open category for formal higher education are that no formal academic qualifications as a student are necessary for registration and that study courses are prepared for academic degrees or professional certificates. The Open University of England is the representative one instituted to undertake formal higher education, though it is basically a correspondence university. As Lord Crowther in his 1969 inaugural address as Chancellor of the Open University stated, "It is open as to people; as to places; as to methods; and finally to ideas".(Ref.9) The Open University of England is an independent autonomous higher education institution totally open for

the education of adults. In Sweden, steps were taken to make every individual university an open university in the eary 1970s. The regular universities were requested to perform the social service function by being opened up for community people. Nowadays, every one in Sweden, irrespective of previous formal education, aged 25 or ever, with at least four years of working experience has the right to enroll in a limited selection of university courses. Under the rules of open admission, students are allowed to take a full academic course load. However, candidates must meet specific qualifications that in some cases, e.g. in mathematics, are required for admission to the subject concerned. (Ref.10)

The Swedish regular university has made it policy to put recurrent education into effect as a means to perform social service functions in addition to its open policy. Recurrent education is an idea advocated by the OCED in the 70s. The OECD stresses that "the essence of the recurrent education proposition is the distribution of education over the life span of the individual in a recurring way." (Ref.11) According to the report, students must be able to take up and leave study throughout their lives. Ingvar Carsson pleads in favor of recurrent education on a variety of grounds: first in order to achieve more equitable distribution of educational resources between the younger and the older generations; second in order to reduce the gap between theory and practice and between workers and students. (Ref.12) It is clear that the requirement of modern university cannot be met in an organization with the sole objectives of the traditional universities. Present resources must be used for new pruposes as well, and new resources must, to a considerable extent, be designed for the new needs.

In the Republic of Korea, the Ministry of Education began a policy to institute open colleges with a view to enlarging educational opportunities of working youths and adults for higher education from the beginning of the 1980s. There were several reasons for which open colleges were instituted; however, the most important reason must have been for promoting social service functions of higher education institutions. A research finding shows that an overwhelming majority of sampled respondents were willing to establish open colleges at the earliest possible time. (Ref.13) It is evident that working youths and adults in Korea have strong desires to make use of open colleges to learn, despite undesirable conditions of themselves and their working places. However, it should be borne in mind that they made important suggestions to the planners of open colleges. The following were the important suggestions they made:

1. To consider forms of attendance for working youths and adults.
2. To consider tuition fees and other expenses for schooling.
3. To put policies of consistency for the education system into effect.
4. To maintain educational standards of open colleges equal to those of regular existing colleges and universities.
5. To establish open colleges in small and medium-sized cities or in rural areas.

6. To guarantee better treatment after graduation from open colleges.(Ref.14)

In the Republic of Korea, the first open college was established in 1982 by presidential decree No. 1078. Article 9 of the decree states, "Entrance admissions in the open college are determined after having examined the scholastic achievement of applicants in high school; however, in case the number of applicants exceeds the enrollment quota, a selective examination for entrance may be performed." Furthermore, Article 10 states, "Teaching classes can be organized and put into operation by making use of convenient times: full time, part time, evening or summer and winter vacation. Radio broadcasting, correspondence, industrial firms, and research institutes may be used as teaching medias." (Ref.15) It is characteristic of Korean open colleges that all applicants are required to submit certificates of graduation from senior high schools or professional colleges, though entrance age, learning place, hours of attending classes and the number of semesters for graduation are open in principle. It is also characteristic of Korean open colleges that curriculum streams are limited to industrial arts and technologies unlike those of the Open University in England. At present, there are three national and three private open colleges in which study courses for the junior college level of higher education and for the Bachelor's degree are set up.(Ref.16) In Korean open colleges, students can major in the following subjects: Electricity and Electronics, Chemical Engineering, Civil Engineering and Architecture, Industrial Design, and Information Management. It is recommended that Korean open colleges would develop into comprehensive open higher education institutions in which an open admission system for entrance is put into effect. Furthermore, it is recommended that regular universities in Korea experiment with a partial open door policy in order to enlarge opportunities of higher education for adults as Swedish universities have done. We can say that social service functions of Korean universities could be performed satisfactorily only when they are open for education of working youths and adults.

Next, I would like to discuss, with regard to opening the university, the undertaking of continuing adult education. This type of opening of the university is well developed in the United States. A type of higher education institution called "the Free University" is a model in which adult educational programs are put into good effect. A free university is defined as an organization that offers noncredit classes to the general public in which anyone can teach and anyone can learn. Such universities began spontaneously on college campuses in the turbulent 60s in response to a deep dissatisfaction with the rigidities of formal higher education. Today they have grown to 200 centers throughout the United States serving 300,000 adults a variety of courses and programs that make the concept of lifelong learning also one of lifelong teaching. These courses may or may not be free of cost, but they are free of academic restrictions, bureaucratic requirements, and formal class settings. They are filled with people of all ages eager to learn and to teach whatever interests them, a

true reflection of grass roots America's learning needs and desires.(Ref.17) Free universities differ in structure. About half the free universities are sponsored by a traditional regular college and university, about one third are completely independent organizations, another 12 percent are sponsored by a community agency like a library and the YMCA.(Ref.18) The structure of the free university is usually determined by the character of the community it serves. Free universities tend to regard credentials as meaningless except as artificial guideposts for formal education or career advancement. They do not see a need for credentials. There does not appear to be any substantiated, intrinsic values in credentials. The main purposes of the free university is to supplement the traditional university and provide a place for innovation and experimental concepts, to make contributions for progressive social change, and to provide lifelong learning opportunities to community adults. Activities of a free university on the university campus would help promote a much more effective performance of social service functions of regular universities.

There are two categories as to opening the university for community people: one is to open its facilities and the other is to undertake continuing education for adults. Opening university facilities themselves for community people could contribute to promoting the performance of the university's social service function. In rural communities, elementary and secondary schools may function as their centers, while universities would function much better as centers of communities in large cities. Universities in large cities have a wider variety of facilities and they have specialists in various fields of education and learning. University facilities that can be open preferentially are gymnasiums, auditoriums, playgrounds, libraries, audio-visual centers, history museums and botanical gardens. In universities of West Germany, libraries and sports facilities are open to community people, and in universities of Japan sports facilities are open to a great extent, though the opening of libraries has not being put into effect well. According to research, the opening of university sports facilities in Japan in the early 80s was accomplished at 70 percent of national universities, 60 percent of public universities and 50 percent of private universities. (Ref.19) However, we cannot but recognize that opening university facilities is presently in the backward stage in the Republic of Korea. The real situation in Korea is that even sports facilities of universities are not open to community people.

In the Republic of Korea, opening of the university to enlarge learning opportunities of adults has been put into effect comparatively well. Open educational programs are mostly concerned with open lectures, attendance courses, vocational guidance, workshops for professional people, short courses for adult learning, and counselling for teen-agers and women; of these, open lectures are most popular.

In universities of developed countries, continuing education for community adults has been undertaken actively since the 1960s, though

there have been pro and con arguments regarding it. All the older universities and most of the new ones in England have departments of adult education and extramural studies instituted with view to giving learning opportunities to community people and to training adult education workers. These departments offer a considerable range of cultural, professional, and refresher courses that last from several years to three years.(Ref.20) In the United States, "Lifelong Education Act" was enacted in 1976. By this act, young and elderly adults were duly guaranteed their learning opportunities not only in adult education institutions in communities, but also at regular higher education institutions.(Ref.21)

In the Federal Republic of Germany, continuing education (Weiterbildung) is one of the important tasks of the universities. In the 1960s when basic changes in the structure of the education system were being discussed, the idea was carried through that universities should be offering studies in continuing education apart from regular courses and seminars. Eventually, in the 1970s, continuing education was officially established as a social service function of the German universities.(Ref.22) The Framework Act for Higher Education (des Hochschulrahmengesetz) established continuing education as an official task of the universities, following research and training. Paragraph 3 of Article 2 states, "The universities serve studies in continuing education and take an active part in courses of continuing education; they support the continuing education of their staff." In subsequent years the functions of continuing education were firmly embodied in the university legislation of all states of the Federal Republic of Germany.(Ref.23)

III. Conclusion

Social service has long been regarded as one of the three main functions of universities, the other two functions being teaching and research. Social service functions of the universities may be categorized into three areas: 1) training of manpower for social needs; 2) opening of material and human resources of the universities for community people and their continuing education; and 3) sending out university people (professors and students) to communities to promote social development through their services.

It is recommended that Korean universities be more positive in opening their material and human resources to develop continuing education for adults. Continuing education must be one of the official functions in regular Korean universities. The number of universities interested in performing this service function has been increasing since the 1970s; nonetheless, the service function is not being considered yet as the official one, mainly because an act concerning continuing education for community adults within the framework of higher education institutions has not been made as in the United States and the Federal Republic of Germany.

The essential task of opening the university is to make a contribution to the realization of a learning society through putting lifelong education into effect. A learning society is a democratic welfare society where educational opportunities are guaranteed to all people equally regardless of socio-economic background, sex, religion and locality, as well as where freedom of teaching and learning are fully assured. Under the concept of lifelong education, every individual must be in a position to keep learning throughout his life, and educational institutions and means must be multiplied, made more accessible and offer the individual far more diversified choices. (Ref.24) Therefore, higher education, under this concept, should be accessible through many different paths, at any age, in any form, especially with a view to continual self-improvement and development. Lifelong education is aimed at leading people to systematic aquisition, renewal, and upgrading of knowledge, skills and attitudes, which have become necessary in response to the constantly changing conditions of modern life with the ultimate goal of promoting the self-fulfillment of each individual. (Ref.25)

Recurrent education would make it possible to put lifelong education into reality. Article 29 of the Constitution of the Fifth Republic of Korea established in 1980 states, "All national citizens have the right to receive education" and "The state should promote lifelong education." Furthermore, Article 14 of the Social Education Law promulgated in Devember 1982 states, "All national citizens are guaranteed a social education." It is recommended that recurrent education be put into full effect in order to realize the concept of lifelong education. One of the most important tasks committed to Korean universities is to promote the democratization of the university through its democratic educational reforms. One of the democratic educational reforms is to open the universities so that their social service functions may be performed satisfactorily. Therefore, it is recommended that regular universities in Korea be open to community people not only to undertake the non-formal continuing education but also to undertake the formal higher education, with a view to promoting their social service functions under the idea of lifelong education.

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TOPIC III

STUDENT GUIDANCE IN UNIVERSITY

The Nature and Scope of Student Participation in Policy-making in Academic Government

About Students Who are Mentally Ill on Japanese Campuses

THE NATURE AND SCOPE OF STUDENT PARTICIPATION IN POLICY-MAKING IN ACADEMIC GOVERNMENT

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I. Missions of the University

University is the name given to an institution of higher education which derives from the idea of a universitas litterarum. The form originally referred to a particular kind of human community, a community of masters and students. To say that the university's people are not just anyone, but rather are masters and students, asserts a difference in the university from other types of human communities, namely, the focus around which its people have come together and the substance with which they deal. The university differs from other types of human communities because of its emphasis on gaining, sharing, and using knowledge. Knowledge is the unique ingredient, and we usually find it easy therefore to agree on a listing of the university's primary functions.

J.A. Perkins identifies three missions of the university, reflections of what he calls the three aspects of knowledge respectively : the acquisition of knowledge is the mission of research ; the transmission of knowledge is the mission of teaching ; the application of knowledge is public service.(Ref.1) When Clark Kerr says that the ideal multiversity is likely to be as British as possible for the sake of the undergraduates, as German as possible for the sake of the graduates and the research personnel, and as American as possible for the sake of the public at large, he refers to the three functions of university-teaching, research, and public service.(Ref.2) The justification for the university, thus, is that it exists in order to perform its major functions: teaching, research and public service.

The teaching and learning process should involve all the members of a university community. Faculty members, though defined primarily as teachers, are also expected to be learners. Students, though traditionally and formally cast in the role of learners, have much to teach, as many professors can attest. Administrators should be learners and teachers, open to new ideas yet ready to share their understanding of the university with students, faculty, and the public at large.

Research is essential in higher education. Today, the emphasis has shifted from what is already known to what has yet to be learned. The research contribution of the university to the larger society, hence, it lies both in the search for new knowledge and in the constant critical reexamination of traditional wisdom. Teaching and research are themselves the major services the university renders.

The primary reason for its existence is not to be found either in the mere knowledge conveyed to the students or in the mere opportunities for research afforded to the members of the faculty, but "At its best the university is and must be a 'service organization,' not by attempting to be something other than a university, but rather by fulfilling its own basic missions as well as it can for its own place and time." (Ref.3)

The university by its nature is or, more precisely, ought to be a center of education and research. In a university, the really important matters of education and research occur in individual and personal relationships. Research is an activity involving essentially only one person, though it is frequently conducted in groups. The process of learning, like the process of research, is in the end a most private affair, requiring for the most part detachment, not engagement. R.P. Wolff observes that the basic educational relationships among the members of the university community are as follows:

> The first is the relationship between an accomplished scholar and a student who wishes to become a scholar. The second is the relation of a mature and developed intellectual to a young man or woman still in the process of intellectual development. The third is relationships among students at every level of development, and analogous relationships among scholars and teachers.(Ref.4)

The whole point of a university, on its educational side, is to bring the young under the intellectual influence of a band of imaginative scholars.(Ref.5)

It is not enough, however, to define the modern university by its relationships in the educational dimension. Although the familiar relationships work well in less complex institutions in which most faculty members know each others personally and are engaged in the institution's primary mission, teaching, the needs of modern society have forced large universities into a multiplicity of functions. This multiplication has altered the character of the institution perceptibly. An even greater, though less perceptible, change has taken place in the nature of each major function : the instruction of students, the conduct of research, and provision of services. It is accurate to say that as the institutions grew larger and more complex, as the role of higher education broadened, modern society, with its insatiable demand for expertise, has drafted today's universities in its service and made them give up their enclave society.

One must live with the reality that a university is an increasingly large and complex organization. Not only is the university an indispensable institution for contemporary society, but broad-based support from the society is also essential to the university. W.B. Martin, discussing different opinions over what forms the university's service shall take and with what priorities, says that :

> A consensus might be possible if we postulate that there exists - by giving a new twist to the old concept of the university as an academic community and redefining it as a community of students, faculty, and administrators - a tripartite community in which each section has a vital role in policy formulation, in the defense of the university's integrity, and in setting the parameters of service. (Ref.6)

Such a community cannot begin to take shape until the participants agree on key assumptions, goals, and values of the university. Individuals and institutions live by certitudes that give meaning to their activities, and community is not possible until we know what those values are. Martin's suggested mechanism for exploring the nature of the university appeals to democratic principles (people affected by decisions of government should participate in government) to increase the chances for consensus which are essential to the university. The primary policy or program decisions, hence, take on relevance to the central functions of the university. All the members of the university become aware of the missions of the university and their respective roles and contributions to the larger society. Policy determination then is shared by all the members, because all have a great stake in the university.

Unshared authority is destructive in the academic enterprise, whether it originates from administrators, faculty, or students. Thus, let all the members of the university hold that the criterion for their actual participation in policy decision-making process is functional utility rather than absolute right.(Ref.7) And that no group-administrators, faculty, or students - should lay claim to absolute control.

II. Policy Making in Academic Government

The concepts of shared authority and interdependent responsibility in the university are important to the shaping of the goals which will guide institutional decisions and performance. The position jointly formulated by the American Council on Education, the Association of Governing Boards of Universities and Colleges, and the AAUP is that :

> The variety and complexity of the tasks performed by institutions of higher education produce an inescapable interdependence among governing boards, administrators, faculty, students, and others. The relationship calls for adequate communication among these components, and full opportunity for appropriate joint planning and effort.(Ref.8)

There is no simplistic formula for sharing the policy determination process in the university. H.L. Hodgkinson even indicates that there is precious little evidence thus far that the concept of shared authority actually works.(Ref.9) The most recent

statement on shared authority says that such sharing takes two forms. One is joint participation and the other is agreement that different parties will, within defined limits, make the decision.(Ref.10) Now campus-wide senates are being created and structures are being modified to provide more direct input and broader representation in campus governance in the United States. Some institutions have created univeristy-wide assembly, senate, and councils to provide more opportunities for the implementation of shared authority. J.J. Corson recognizes some advantages for such mechanisms. But the perfecting of such mechanisms requires that further agreement be hammered out as to:

(1) Who should be represented on such a council, senate, or assembly,
(2) How and in what proportion each faction should be represented, and
(3) What authority the council, senate, or assembly should have; that is what range of issues they should be authorized to consider and what weight their decisions should have. (Ref.11)

These dilemmas are the basis of representation, the appropriate structures to be used and functions to be performed, and the relationships of these university-wide mechanisms with existing governance structures. Concerning representation, W.M. Wise observes that:

> The incorporation into government of representative from campus groups ..... appears to be a move in the right direction. The fact that multirepresentational bodies with faculty and student participation have been created in addition to student and faculty bodies may, however, prove to be unworkable. Much will depend on how clearly the separate student and faculty bodies can define limited jurisdictional areas of responsibility which will not be pre-empted by the more inclusive groups.(Ref.12)

Closely related to the question of who should be represented is that of the appropriate structure to accomplish such representation and function to be performed by the structure. A justification for separate structures has been developed by W.F. Sturner in which he advocates a bicameral legislative model because American education is simply not at the stage where faculty and students can actually sit togegher and speak and vote as equals representing separate constituencies.(Ref.13) Sturner argues that separate legislatures would also reduce tokenistic student representation and confer some authority and responsibility on students which the faculty would be forced to recognize.

According to K.P. Mortimer, however, it does seem, from the early experience in the United States, that separate legislative bodies may not develop their special responsibilities to the extent that one would expect. Where there exists a higher body, the tendency may be to go directly to that body rather than to waste time in lower

forums. In effect, the result is a unicameral body.(Ref.14)

The University of Waterloo in Ontario, Canada established in 1969 a single, or unicameral, supreme governing body which combines the faculty senate, the governing board, the administrative council, and the student government into a single policymaking group.(Ref.15)

Although the movement towards greater faculty and student participation in governing boards such as universities in the United States are undergoing, Waterloo's approach is far away from American scene. This approach even may not be appropriate to U.S. higher education because thus far no one has any basis for stating that faculty and students would perform the trustee's role in a manner significantly better than the lay trustees. Within the limits of authority fixed by state constitutions and statutes, policy-making power in most U.S. institutions of higher education reside in a governing board which is legally charged with the direct control and operation of the university.

Narrowly speaking, however, the university exists for students. They are the principal learners and the original clientele the university serves. It is their daily lives that are most affected by policies on university life and the conditions of learning.

Although students have traditionally neither claimed nor had power in the university community, they have recently come to be regarded as a constituent element of the community with a role to play in the determination of educational policies and practices. The Berkeley Free Speech Movement crystallized two views about the proper role of students at American universities. One view is sometimes summarized in the phrase the right of students is the right to learn. The other asserts the right of students to participate in university governance.(Ref.16) Many who take the latter view demand student involvement in the formulation of educational policy and student participation in decisions on the nature and direction of the university itself. But the crisis at Berkeley has not been confined to student rights: it has been a crisis involving the basic character and mission of a university and its forms of authority and governance. (Ref.17)

The rationale ordinarily given for student participation in academic decision-making is the principle that those who are affected by decisions should at least have a share in making them. E.J. McGrath adds the following reasons:

> Students believe that if education is of fateful significance to them, they should have a voice in its character and quality; students today have stronger social and educational motivation and could play a fruitful and facilitative role in educational reform; participation in governance is preparation for responsible citizenship in the larger society; students have asserted control over their personal conduct and students can play a unique role in the improvement of institutions.(Ref.18)

III. For and Against Student Participation

1. Rationale for Student Participation(Ref.19)

What specific reasons can be advanced for giving students a formal role in academic government? The most compelling rests on the generally accepted political proposition that in free societies all those affected by a social policy have an inalienable right to a voice in its formulation. In this sense, students are today not adequately free. Only through emancipation from the institutional restrictions imposed by others, and by full participation in academic deliberative and legislative processes, can they gain the status of self-determining individuals. Assured of these rights, they could play a not insignificant role in altering the policies and practices which they consider offensive to free men.

Institutional Professions and Actions : Students understand that the amount and kind of education one receives largely determines his social status, his economic well-being, and the effectiveness of his participation in the life of his time. If, as they are told, education is of such fateful significance, and if they are to be the recipients of its benefits, they are understandably asking why they do not have a recognized voice in determining its character and quality.

The Sophistication of Students Today : Another reason for students' involvement in governance relates to the concerns and motivations of youth today. Student's preoccupations suggest that they could be more thoughtfully effective than their predecessors in taking part in the reform of higher education. They have also become sensitively conscious of the potential therapeutic value of education in curing the ills of an ailing humanity. Students are now concerned about the relationship (or the lack of it) between the exercises of the classroom, the library, and the laboratory, on the one hand, and their own existence and the conditions of life generally, on the other. Socially conscious as they now are, it is not surprising that the personal and social goals of students move them to be seriously dissatisfied with the unrepresentativeness of academic bodies and with the inadequacy of decision-making processes and the elephantine cumbersomeness of legislative action in colleges and universities.

Students Should Be Educated for Democratic Living : A third justification for student participation in academic government stems from declared goals of institutions of higher education. Educators consider the preparation of youth for the exacting responsibilities of citizenship in an increasingly complex democratic society to be one of the most important purposes of colleges and universities. Students believe that if they had a proper role in academic government, an important dimension would be added to their education and an indispensable element to their preparation for effective citizenship.

Students Could Help Improve Higher Education : Fourth among the reasons for student participation in the deliberation of faculty bodies is that students could accelerate the correction of patent

deficiencies in present curricular offerings. Since students far more than any other persons are where the educational action is - in the classroom - they are perforce better informed about educational substance and processes. The significance of higher education in the life of the average educated person would doubtless be increased if students sat on committees which determine the character and content of instruction. As students juxtapose their learning experiences in the classroom with the events in the world outside, they feel that their education is not sufficiently broad and relevant to the personal and social decisions their generation will be called upon to make if the human condition is to be improved. Rightly or wrongly, students believe that if they were given a voice in academic bodies, they coul be helpful in bringing instruction closer not only to their own interests but to the conditions of modern life generally.

The Improvement of Instruction : The fifth, and perhaps the most persuasive, argument for student participation in academic government rests on the special and sometimes unique information students possess about the teaching-learning situation. Students are peculiarly situated to make judgments concerning the faculty member's performance in discharging his responsibilities in the classroom. Since custom, if not ethics, prevents all others from viewing the instructional situation, students are the only group capable of gathering the relevant facts. Only they can day by day actually observe the practitioner's fulfillment of his professional obligations - his knowledge of his subject, his preparation for the presentation of specific assignments, his attitude toward and availability to students who may need additional help, and his conscientiousness in seeing that research and consulting do not interfere with his teaching obligations. If students, often the sole possessors of relevant information, were given an officially recognized role in evaluating individual faculty members on established criteria of acceptable teaching performance, they might assist in the correction of the present inadequacies in teaching. It has often been said that the quality of education a particular institution offers is determined by the kinds of faculty members who serve it. Since students increasingly recognize this fact of academic life, and since they feel that they have constructive criticisms to make with respect to their education, they believe that they ought to have a voice in selecting staff members and evaluating their professional performance.

2. Objections to Student Participation(Ref.20)

The foregoing arguments in favor of the involvement of students in academic government, as persuasive as they are to some, leave others unconvinced. Many informed and sincere persons firmly believe that if students gain an authentic voice in academic government, the ends of higher education will at best be confused, and at worst subverted. Their reasons for taking this position deserve thoughtful consideration.

Students Will Dominate the Academic Society : The critics' most serious question on student participation has to do with the power

structure within the academic government. Some opponents contend that the admission of students to important academic bodies would so alter the balance of power within them that, in fact, virtual control would shift from the administration and the faculty to the students. The antagonists to student participation do not usually spell out the theoretical results of such a realignment of control, but they do point to their concrete manifestations in some of the non-negotiable demands of activists.

The Immaturity of Students : A second objection to student involvement concerns their youth and limited life experience. Critics consider the behavior of today's students, especially undergraduates, at times capricious and frivolous, at other times inflexible and dogmatic - in a word, immature. Defenders of students say that this is too much to expect from young people in their late teens or early twenties. The opposition promptly agrees with this judgment and cites it as their primary reason for not giving students a decisive role in academic government.

The Brief Involvement of Students : In the matter of student participation the members of the profession voice a third reservation. They point out that most students, especially the numerous undergraduates, spend only four years in any one institution. Under these circumstances some of the more permanent staff members question whether even the most earnest students can acquire the perspective and the committment essential to sound judgment on longterm policies. These senior professionals doubt not only that students can deal prudently with the issues and problems related to the destiny of a college or university, but that they can deal wisely with the personal well-being of the large company who have cast their lot with it. The critics buttress their view by pointing out that students' indifference to long-run institutional welfare is confirmed by the shallow and transient concern of alumni, whose devotion to alma mater, once they have gained the degree, rapidly evaporates. Many faculty members, some of whom give a whole professional life to a particular institution, contend that neither their own nor the institution's welfare should be placed in the hands of those with such ephemeral committments.

Ignorance of Professional Values : A fourth objection to a larger role for students in academic government is related to, but differs basically from, the shortness of the students' institutional affiliation. It is also related to maturity but specifically concerns one of its components, specialized abilities, and embraces the rich complement of comprehensive knowledge and special skills that is involved in the broad practice of a profession. The components of understanding, esoteric knowledge, and seasoned judgment that characterize the expert and confident practitioner of any profession are acquired slowly. Faculty members object, therefore, to enfranchising students in regard to matters with which they can at best be uninformedly sympathetic and at worst callously indifferent.

Interference with Study and Gainful Employment : A fifth objection to student participation comes from some educators who oppose it not in principle, but for the practical reason that in the nature of things students cannot give the time necessary for a faithful discharge of their responsibilities. Those critics who have had the experience of meeting with committees for several hours a week sometimes for a full academic year or more know what a distractive burden such activities can be. They doubt whether even the ablest students could devote the required large proportion of his out-of-class time to committee work without adversely affecting his educational progress. Many unbiased persons believe that until some way is found out of this dilemma, it is delusive and futile to advocate or accept student representation in academic policy-making bodies.

IV. Summary and Conclusion

An evaluation of the arguments advanced for and against student participation in academic government permits the drawing of some practically useful, if not definitive, conclusions. In this unsettled stage in the evolution of new mechanisms for academic policy-making, no one can be dogmatic or authoritative about which policies will finally turn out to be unassailably sound, and which impracticable.

Nevertheless, the available body of fact and informed opinion does suggest some potentially useful conclusions about the merits of student participation and the conditions under which it would most likely benefit the establishment of higher learning and more importantly enhance the education of its patrons.

The weight of opinion indicates wide acceptance of the idea that students should have some voice in the bodies which determine the purposes and the programs of institutions of higher education. Since virtually every committee to one degree or another deals with matters which affect the character and the quality of the students' education, and since students' experience may often shed peculiar light on these matters, it is reasonable that students should hold membership in all such deliberative bodies. Since, however, the interests and potential contribution of students would inevitably vary in accordance with the differences in specific responsibilities between one committee and another, the proportion of student representation should doubtless also vary.

Except those on the radical fringe, almost no members of the academic society contend that because students are the most numerous citizens of the commonwealth of learning, they should uniformly have majority representation in its deliberative bodies. American institutions with traditional participation testify that after a brief period of adjustment to their newfound power, students generally behave with customary academic decorum and consideration for their associates; and even where they consider their representation disproportionately small, they do not demand numerical dominance.

On one aspect of the balance of power between students and faculty members and the administration, experience sheds particular light. The assumption that continuing conflicts of interest among these groups will cause a constant splitting of the vote along party lines is denied by the facts. Where students have been admitted to faculty committees, they have not precipitated a partisan polarization of views. Students and faculty members rarely line up in opposing camps, even though at times selfish interest would move them to do so.

Anyone who has had experience with the indissoluble factional differences among the members of faculty committees would not consider the danger of polarization a defensible argument against student participation. Where faculty and student groups have deliberated together, differences of opinion have usually been resolved through discussion and the results have led to a consensus acceptable to the larger constituency. There is no apparent reason to assume that running feuds between students and non-students would result from a mixed membership in academic bodies.

In maturity of conduct and judgment, students seem to vary with their experience and their length of service in deliberative bodies. The responses from presidents in the United States indicate that in their first meetings some students tended to be defensively aggressive and needlessly talkative. On the positive side, faculty members and administrators with experience reported that students do introduce into committee discussions points of view and facts which other participants may not be in a position to have. To this extent students enrich the policy-making process and make the outcome more acceptable to those who have to live under it.

In summary, the facts permit the generalization that the institutions having the longest experience with an academic government involving students feel that on balance it has real advantages over governmental structures dominated by an administrative patriarchy or a faculty oligarchy. Any government, of course, which assures all its constitutents the rights of free speech and the ballot will suffer strains, conflict, and occasionally vigorous reaction to majority opinion. Institutions which have had student participation for years have experienced these inevitable accompaniments of democratic living. There is no widespread feeling among their members, however, that under more conventional forms of government their parliamentary difficulties would have been eased, the interests of constituent groups more fairly represented, or their business more efficiently conducted.

This generalization must be qualified with the observation that those institutions which have had the longest and most successful record of student participation inaugurated it when life in the United States at large and on the campus in particular differed markedly from the conditions which prevail today. These changed circumstances do not necessarily argue against student involvement. On the contrary, they suggest the very reverse; that is, greater student participation

may be required to solve some of the current problems involved in adjusting higher education to the social conditions of life in the eighties. But the needed changes will probably be more smoothly accomplished if the altered context of reform is understood.

This presentation of the arguments for and against student participation has proceeded from the basic conviction that the student's own future well-being and the quality and condition of our national life will be largely determined by the kind of higher education he and his successors receive. It stands on the principle, therefore, that the student and the whole society have a fateful stake in the character and quality of higher education. Consequently, it supports the view that students have a clear right to a formalized voice in the establishment of the purposes and in the shaping of the policies and practices of colleges and universities.

This presentation also advances the case for student participation on the basic principle that undergirds any free social order; that citizens generally ought to have a voice in, and are capable of, determining the character of the social institutions which in turn determine the character and quality of their own lives.

A large percentage of students today believe that they do not have such a voice. At the same time they consider theoretically invalid and pragmatically unsound some of the prevailing academic policies and practices. Thoughtful observers of the present breakdown in the traditional conditions in academic life differ in their ideas concerning what reforms are needed and how they are to be accomplished. But they exhibit a considerable consensus that students must play an influential role in the revisions of these policies and practices. Hence the circumstances of life in institutions of higher education reveal that the issue whether students should be involved in governance is now academic. The question is not whether students should participate, but how, to what extent, and through what innovations in organization and procedure this involvement can be most expeditiously and effectively achieved. These and other matters relevant to any full treatment of academic government, however, lie outside the scope of this paper.

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ABOUT STUDENTS WHO ARE MENTALLY ILL ON JAPANESE CAMPUSES

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I. Preface

In Japan no single event, with the possible exception of marriage, determines the course of a young man's life as much as entrance examinations and nothing requires as many years of planning and hard work. We usually call it "examination hell." A young man is willing to endure these tortures because, if successful, he gains a great advantage by joining a large successful firm where he can remain for the rest of his life.

The number of men a large firm takes in each year is so large that it would be almost impossible to select on the basis of personal evaluation. One's station inqlife is not determined by birth, but to some extent by the time at which he gets his first job.

College entrance is considered so crucial that many students who fail the examination the first time choose to wait a year and try the examination again. Those students who attend special preparatory schools are called "ronin," the name formerly used for lordless samurai. A student ordinarily begins to prepare seriously about a year or two before the examinations that take place in January or February.

II. The So-Called "Education Mother"

Success or failure in examinations is not only the success or failure of an individual but of his family. Japanese mothers fear the opinions of others about their children because children's achievements influence the mother's status. They sometimes care more about the respect of others for their children than about their own freedom. In order to win acceptance they study hard. They fear being rejected or negatively evaluated by others. They can keep fear at bay by studying hard. Frustrated mothers who despair at their husband's lack of success put their last hope on their children and wait for a great result someday.

Usually they are unhappy with their husbands. Sometimes they pretend to be happy. They repress their unhappiness and try to solve their problem through their children. They cannot confront their own ideas and feelings. They are out of touch with each other. They usually don't experience gross disharmony. Their problem, however, centers on a failure to communicate. Their refusal to embrace the crucial truth which is marital discord has a continually negative effect on the children. They transfer their marital frustration to

their children.

Without being aware of what they are doing, they often say "I never really wanted anything for myself except your happiness." They release their marital frustration and hatred for their husbands by saying the phrase. The truth is that they are not emotionally mature as they seek their happiness. Their over-protection is a disguised form of their frustration and hidden hatred. They hide their dependency and they are not aware of their attitude to their children.

The Japanese family functions as a unit. The family profits from the success of its members and is damaged by their failures. A boy is a son rather than an individual in his own right. When her son achieves success, the mother can get rid of her inferiority complex and be able to express her years of vindictive anger and resentment. It is understandable for her to regard superiority as the sole means of achieving satisfaction. The responsibility for winning prestige is generally delegated by the mother to the child, who later becomes mentally ill on the campus. Those students have felt excessive pressure to succeed from their childhood.

Their families have made a great effort to raise their social status through their children. Their parents have a high degree of concern about social prestige. The emphasis on achievement usually causes the children to suffer from a serious inferiority complex whether they succeed or not, because they cannot feel they are loved for themselves but they feel they are loved only if they succeed; because their psychological security is tentative and they constantly expect that tomorrow they might be rejected. Their role is experienced by them as being of their family's social striving. They internalize achievement values.

In these circumstances they depend almost entirely for their psychological security on what their parents think of them. They have no effective protections against this anxiety-creating situation and they are in the control of their ambitious and anxious mothers. Some anxious Japanese mothers struggle and use all their energy and make great efforts to look big in the eyes of others through their son's success.

Therefore competition creeps in from an early age. Considering that superiority is the only immediate satisfaction for a mother, it is not strange that they drive their children to apply to a first-class university and employment in a prestige company. Mothers always entertain the hope that their children will be admitted to a difficult school, and that their prestige in the community will rise accordingly. In this process some children feel inadequate because their standards are unrealistically high.

Nobody, however, can restrain the so-called education mothers from pushing their children toward first-class universities and ignoring severe criticism. Prof. Vogel who is a friend of mine describes the Japanese examination season as following. In the year

preceding the examination the mother spends much time investigating expenses, entrance requirements, and the school's records in successfully placing their graduates. She gathers information. In addition, she spends much time consulting with her child's teacher and others.

Naturally she wants her child to get into the best possible university. Indeed the family is likely to have frequent and sometimes heated discussions during the period of decision-making. The child's household responsibilities are taken over by his brothers and sisters who are warned not to interrupt his study. The family is collectively on tiptoe for fear of disturbing the young scholar. The slightest sign of a cold is taken seriously as a possible hindrance to examination success. Community activities and social visting come to a complete halt, so absorbed are the families in their children's preparation. Conversation revolves about the one topic of most immediate concern to all-examinations. A number of mothers reported that they are unable to sleep on the night before the examination. By the end of a series of two or three examinations, mothers as well as children are so exhausted that they often have to go to bed for a few days. There is a hiatus of several days before the results of the examination are announced.

Tensions increase as families await the results. Some mothers have said that there is such an ominous weighty feeling during this period that they would almost prefer to hear negative results rather than continue the uncertainty. The dramatic climax comes with the announcement of the results. The name or code names of successful candidates are posted at the universities. Sometimes the name of successful candidates for well-known universities are announced on the radio. If a child has succeeded, he and his parents are so jubilant and glad that everybody can recognize it. Sometimes they cry for joy. There are some professional students, what we call Banzaidomei, who get money and swell the atmosphere of joy for him by saying Banzai. If a mother looks troubled, friends do not ask the results. Stories of juvenile suicide as a result of examination failure are widely publicized in the mass media.

Statistical reports in newspapers and in magazines indicate precisely how many students from which high schools enter which colleges. Any middle-class parent can rank the few high schools by the number of their graduates admitted to first class universities and also the leading junior high schools by the number of graduates who enter the best senior high schools.

III. The Result of This Situation

Nowadays some students exhaust themselves in their efforts to succeed in the entrance examinations. After their efforts to enter good schools consume their energy, they tend to lose touch with their real selves and become lethargic.

They have for a long time been urged into a first class university, and are not able to know what they want in life. The purpose to enter a first class university gives meaning and direction to their present life. However once they achieve the purpose, they will have no more meaning and direction in their life. When they achieve their purpose, they can get satisfaction but satisfaction will not last so long. They can get satisfaction in April and become mentally ill in May.

We usually call this phenomenon at first "May-syndrome". Students enter the university in April with high hopes and become disappointed and enervated (spiritless) in May. However their spirits highten after May. They can cheer themselves up by finding a purpose on campus. They finally recover their spirits. Now we call this phenomenon "student apathy". The difference is that their enervation is more pronounced and lasts long, sometimes it lasts for a year or two. The most apathetic students leave school before graduation. Ten percent of all freshmen are mentally ill according to some studies. The figure is as high as 14 percent-15 percent at some universities. One third of these students are seriously mentally disordered. They need to see a psychiatrist.

On the way to their purpose they took no interest in any activity, therefore their satisfaction is short-lived. They looked toward only the results. If they were interested in study, their satisfaction and happiness were supposed to be long-lasting. These students were socially well adapted before they became ill. It means they have studied hard and obeyed their parents' orders. They were honest, rigid and they had a strong sense of responsibility and duty. Generally speaking they were good students and good children. Their personalities were compliant. They were socially desirable. They wanted to be socially accepted. For all their adaptability they are deeply troubled students.

They have always tried to please others at the sacrifice of their own needs and impress others favorably and as an important person. They have been very sensitive to others' needs but they have neglected their own needs for a long time. This attitude always produces a feeling of strain. They may feel that they are standing on tiptoe all the time.

Finally they cannot realize what they want. They know what they should do. They are very repressed. As a result they have had a strong sense of anxiety. They suffer from a pervasive inertia. They have been too much engaged in studying and competition, having had little time to play with friends and little experience of achieving something through cooperating with others. They have been too busy to develop their ability to be deeply emotionally involved with others. They find it difficult to make friends and choose the security of isolation over the risk of being rejected. They feel uneasy with the opposite sex, beginning to initiate conversations and keeping them going. To protect themselves they put emotional distance between themselves and others. They have an inner need, however, to get

involved.

Even though some of them are able to adapt to campus life without breaking down, they begin to feel anxious before graduation. Because they are less confident than psychologically healthy students about everything except studying. They have a fear of being negatively evaluated by others and a fear of intimacy because they feel others will not like them if others know what they are thinking.

As a result of this kind of competition some students avoid competition. This is another problem of competition. When they retreat, they feel they have failed and don't struggle to fulfill their real selves. They are not so seriously mentally ill as those who I have written about, but they are also discouraged and feel a sense of powerlessness. They are not so well socially adapted as those whom I have written about. I would like to call this type the detached type and socially well adapted as compliant type. They are rather irresponsible. Because of the process they have been through, they are inclined to seek an easy life. They hate to be severely disciplined and want to be treated leniently. They tend to appeal to other people's soft side. They are always looking for a short-cut which is the easy way that requires little energy. They don't know their life goal which makes hardship seem less severe and worth facing. Their goals are negative: they want not to be involved, not to allow others to intrude on or influence them. Their desire is to be allowed to stay alive within this negative framework. As a result they are always anxious to avoid difficulties. They look only toward results and lose the ability to enjoy the process.

If I were to say to these students "You had better do what you like", they ask me "How can I find out what I like to do." They may have plans for today or this week but they don't have any over all plan for their life. Every day passes uneventfully. They enjoy traveling or going to drink or sitting listening to music in their small room or climbing easy mountains or having coffee in a beautiful coffee shop, but there is something lacking. They feel that something important remains to be fulfilled. They may conduct their life as they like at school, or in a company and alone in their room, yet they do not feel, at the bottom of their hearts, entirely satisfied. They suffer from their estrangement from themselves.

Among them there are some people who may keep themselves busy, but their life goes nowhere. They try to divert their minds from the serious depths of life. Though they may keep themselves occupied from day to day, their life is going nowhere. They can work and function like a live person, but there is no life in them. They don't know why they feel this way. None of their activities give them a deep feeling of satisfaction. Their satisfaction is always superficial. A surface flurry of activity only keeps them from confronting the void at the bottom of their heart.

Another thing I would like to stress is the problem of communications. They may know many people whom they call friends.

However they may not have a truly close friend whom they can trust completely. Perhaps they enjoy chatting. But they may feel lonely wasting time in making small talk with their friends. Despite the pleasure they derive from chatting, they may feel they are only killing time. They cannot have a total commitment to others. Many studies have revealed a deep hunger for an atmosphere of trust and fraternity with their friends. The young student who comes from the countryside to Tokyo wants to get emotionally involved with others. But a total commitment to others is hard to obtain. No matter how long they make small talk, they get nothing meaningful except amusing themselves. Sometimes they may spend a day alone in idleness, but through this day spent in idleness they feel they are being gradually ruined from within. In their effort to relieve tedium they succeed only in diverting themselves from the deeper meaning of life.

Sometimes they make the decision to act and lead a meaningful life, but they don't know what kind of action to take. They end up doing nothing. Youth will pass with no adventures worthy to be recorded.

III. Why is examination pressure so intense?

(a) Japan is a small crowded country with few opportunities for success. This does not explain everything. There are many universities in Japan which are not difficult to enter, and there are opportunities for success aside from examinations. There are other crowded countries where opportunities are limited but examination pressure is much less severe. To get into one of the leading universities is hard, because the results are rewarding.

(b) Many large companies recruit only from prestige universities. Therefore one's opportunity to achieve security and social mobility is highly compressed into one brief period of life. The rapid upward mobility of the Japanese has been made by using the educational opportunities provided by society. The best way for a commoner to rise on the social ladder is to enter a famous university. They try to stand inside the society, acquiring a school career.

The importance of two systems, the school and the family, like the life-time commitment to a firm, are further manifestations of a striking characteristic pervading Japanese social structure.

(c) The belief about the Japanese class system since World War II is that there must be equality of opportunity for all and a chance for everyone to have his turn at bat. Another belief has been competitiveness.

All men must have an equal opportunity to get the good things of life. The stage is thus set for the education-conscious mother. By education-conscious mother I mean a mother who drives her child into a first class university and puts her nose into his private life and tries to have much effect on his spiritual life.

(d) Japan is achievement-oriented. Meritocracy discriminates among people. Therefore it tends to produce basic dissatisfaction. In my opinion for example in the U.S.A. meritocracy applies only in school and the work place, but in Japan meritocracy applies to all aspects of life including one's private life.

In the U.S.A., although the boss's position is superior at work, you can call your boss by his first name. Outside the office you and your boss are equal. Discrimination due to meritocracy has significance outside of the work place. However in Japan the office relationship extends to the world outside the office. Therefore in Japan an inferiority complex caused by failure to succeed in one's occupation carries over to all aspects of life. It means one's function in the society tends to determine social status.

(e) Considering the process of Japanese modernization, you can also understand how Japanese put much importance on education and learning. The rush to study Western learning began after Commodore Perry forcibly opened Japan in 1853.

These many reasons have combined together and produced education-conscious mothers and students who are mentally ill. Today I have discussed those Japanese college students who are mentally ill. Please remember that more than half of Japanese college students are of course not mentally ill.

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TOPIC IV

TEACHING FUNCTIONS OF UNIVERSITY AND CURRICULUM

Curriculum and Teaching at Japanese Universities

Problems and New Directions of University Curriculum in Korea

CURRICULUM AND TEACHING AT JAPANESE UNIVERSITIES

- New Implications -

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I

Formally the "teaching" function of Japanese universties has a primary status in comparison with the function of "research." Article 52 of the School Education Law defines the characteristics of the university "as a center of learning", and states that the purpose of the university is to "aim at teaching and studying deeply professional learning and technical arts as well as giving a broard knowledge and developing the intellectual, moral and practical abilities." In most of the official regulations, the primary educational role of the university is always stressed over other roles.

However, in reality, more university professors consider "research" as their primary responsibility rather than "teaching." According to the findings of our national survey on institutional management in higher education in Japan(Ref.1), most academic staff prefer to devote more time to research rather than to teaching, and research is always givien primary emphasis, while teaching is considered secondary.

More dramatic evidence of the research-oriented tendency among Japanese professors was made clear from another of our national opinion surveys concerning Japanese higher education. This study, carried out in 1979, surveyed a large number of foreign professors at Japanese universities and colleges.(Ref.2) According to the finding, nearly 80 percent of the foreign professors consider that Japanese professors are much more "research-oriented" than "teaching-oriented." Additionally, it is quite shocking to find that many of the non-Japanese professors at Japanese universities are extremely critical of the attitudes of Japanese professors. Their criticisms can be summarized as follows:

(1) In general, Japanese professors seem to have more respect for research than for teaching, and identify themselves as researchers rather than teachers.

(2) The Japanese curriculum is poorly organized and unstructured. Most courses and programs seem to be organized only

according to the convenience of the professors and not necessarily according to the students' needs.

(3) Teaching methods and instructional procedures are too uniform and inflexible, and they are particularly unsuitable to practical training subjects, such as languages.

(4) In comparison with U.S. and European universities, few institutional considerations have been given to the teaching function at Japanese universities. There is neither staff-development centers nor evaluation of curriculum and teaching. Indeed little research on teaching and learning in higher education has been conducted in Japan.

Such criticism is in sharp contrast to the high marks given to other levels of Japanese education by foreign critics. On the one hand it is generally recognized that Japanese primary and secondary schools are "among the most effective in the world"(Ref.3)

On the other hand, higher education is considered to be "in many respects the weakest part of the entire system."(Ref.4)

The question we must ask ourselves is whether this severe criticism concerning the educational weakness of Japanese universities is correct, or, if not, how should we correct misunderstandings

II

Though there are several of these points with which we would take issue at least we must admit that there has been very little concern with curricula and teaching on the part of Japanese university professors. As is evident from the findings of our national opinion survey of deans and professors in Japanese universities conducted in 1982, even at the institutional level, very few systematic efforts for improvement in teaching and curricula, as well as in the study and evaluation of the educational process have been undertaken in Japanese higher education.(Ref.5)

One of the major sources of the lack of concern with the teaching function among Japanese professors seems to have come from a traditional concept which distinguished " a school" as "a place for education" as against "a university" as "a place for scholarship". According to Arinori Mori, the first Education Minister (1885-1889) in the Meiji Central Government, who established the basic structure of the national school system, "a school" is an institution in which pupil's learning is heavily dependent upon the aid of others(teachers), while a university is an institution in which students are studying independently with little aid from others(teachers).

Because the university was considered the most advanced institution of higher learning which accepted only qualified stu-

dents who needed little instruction, those students selected by a university were considered to be members of an elite group who were supposed to have already both clear goals for study and the capacity to learn independently; therefore, they were presumed to have the least special need for teacher assistance.

In addition, another traditional concept of the university reinforced the downplaying of the teaching function. This was the idea that the functions of both research and teaching are in harmony, cannot be separated and that they are not in a conflict relationship with each other. Thus the professors' research activities were considered automatically to contribute to their students' progress in education. According to this theory, all the professors should do is to deepen their research and scholarly activities and "to profess" what they have investigated without special regard to "how to teach" students. This is because it is considered to be totally the students' responsibility to learn something from what professors "profess" and then to integrate what they obtained from various academic offerings into the total educational experience of their own college life.

Although these traditional concepts of university education were established at a small number of elitist universities(mainly at seven former Imperial Universites) before the World War II, this consciousness has continued without modification among a great number of new professors at new universities and colleges which were created just after World War II in spite of the fact that new university system was drastically reformed under the strong influence of American higher education. This traditional consciousness is still now prevalent among most university professors (120,000 full-time faculty members) at almost one thousand universities and junior colleges in contemporary Japan.

III

After the unprecedented rapid expansion of higher education in Japan during the past two decades, a sort of change and diversification among student applicants began to appear from the mid-1970's. More than one of three young people from the 18 year old population have gone on to colleges, but increasingly, more students are also choosing non-collegiate types of post-secondary educational institutions such as specialized vocational and technical schools (calld "senshu-gakko" or "Kakushu gukko"). On the other hand, during the past five years, there has been a slight decline in the rate of college-age students attending colleges.(Ref.6) Changes in students' college choices and career aspirations seem to be extremely responsive to changes in society; such changes include the introduction of new entrance examination systems, shifts in employment market trends, as well as other social and economic changes. After the mid-1970s and increasingly in the 1980s, it has become much more difficult for Japan's universities to obtain enough resources both from public and private sources. In this generally unfavorable situation there are growing problems with education among many college students. Several

empirical findings show that many students spend most of their college days very passively without any serious motivation for independent learning. They find their curriculum irrelevant and are disappointed by the classes and lectures at the universities to which they were admitted. Governments and business leaders often complain that university curriculum is too anachronistic and not practical. The university is often criticized that it is not an educational place but merely a screening device for manpower, and that it is not a place for learning but a "leisure-land" for idle youths.

In this situation, an increasing number of professors are now faced with grave educational difficulties: how does one deal with students who are weakly motivated and who have a passive attitude toward their classes and obscure goals for their academic life and future career goals?

The increase of such students is now gradually underminig the professors' antiquated premise that college students are well qualified to learn independently without the aid of "others" (teachers), and that students can design their own curriculum according to their academic goals and integrate all of the findings they obtained from various specialized academic offerings into their whole educational experience. More and more professors are now forced to recognize that this old assumption is a myth and that some kind of intensive teaching approaches are becoming necessary for college teachers. And there is a growing interest among college professors in curriculum reforms which should help to offset these educational difficulties, as well as faculty-development programs and evaluation of teaching effectiveness.

IV

The Japanese educational system enjoyed a rapid,unprecedented, and continuous expansion of both enrollment and financial resources during the 1960s, which reached a plateau by the early 1970s. But in the mid-1970s it entered a period of no expansion and even of decline. The population of the kindergarten-age cohort has recently reached its lowest level since the World War II "baby boom." As a result, most kindergartens have canceled nearly half of their classes. This decrease will soon hit the primary schools and later it will affect secondary and higher education.

The most urgent and disturbing problem which university administrators face is the demographic future. The population of 18-year-olds, who are the major clients of higher education, will grow from 1.7 million to 2 million between 1984 and 1993. However, the size of this age group will shrink dramatically--from 2 million to 1.5 million--between 1993 and 2000.(Figure I) How to survive in an age of declining enrollment is becoming a serious question that deeply concerns university administrators. Perhaps during the next decade Japan will enter the age of "student consumerism", in which the seller's market in higher education is shifting to a buyer's market and colleges to recruit student clients, as is happening in the

United States must every effort.

However, the demographic change - the great decrease of the biggest client for traditional higher education is not the only challenge to the future of Japanese higher education in the 1990s. Although this is a serious problem facing higher education institutions whose survival is utterly dependent upon adequate numbers of students of a certain age group, a much more grave problem stems from the other important changes which are expected to take place almost at the same time.

Among many of these expected changes are structural changes in the traditional employment system based on the life-long and full time employment and seniority system, the halt of increases in government subsidies to public and private higher education, the internationalization of the higher education market in which a number of foreign universities have already began to recruit Japanese students either by building branch campuses in Japan or by sending admission officers to Japan.

If all these challenges will be taking place in Japan nearly at the same time in 1990's, higher education will be faced with severe competition from institutions of postsecondary education either in recruiting students or in finding suitable job opportunities for their graduates. And in this case, the only institutions which can adapt to these changes can survive-- the institution with a relevant curriculum and effective teaching to handle with these challenges. Only these kinds of institutions will be able to attract enough students.

Therefore in order to suervive in such a severe age, the best strategy for the university should be to make the basic functions of the university adaptable to changing social demands.

V

In his Academic Revolution(1968), David Riesman described the process of the rise to power of the academic profession in American higher education.(Ref.7) In 1980, he published On Higher Education, in which he predicted the rise of student consumerism in the near future.(Ref.8) According to Clark Kerr, who wrote the preface to this book, this shift from academic merit to student consumerism is one of the two greatest reversals of direction in the entire history of American higher education. Because of the forthcoming demographic decline, decreased financial support, and rising costs, Riesman said, students are now turning from being "supplicants for admission" to "courted customers", and students are gaining increased market power while faculty influence is declining. In an era of student hegemony, more and more students are increasingly becoming "passive consumers" who want to buy only easily obtained educational services sold at "academic supermarkets" without the effort of designing curricula and

(Figure I) Trends in Japanese Higher Education 1960-2000

高等教育の規模等の推移

- 18歳人口－3年前の中学校卒業者数
- 高等学校新規卒業者の大学・短期大学進学志願率 ＝ 当該年度高等学校卒業者のうち、大学又は短期大学へ願書を提出した者の数 ／ 当該年度高等学校卒業者数 ×100
- 大学・短期大学進学率＝ 当該年度の大学・短期大学入学者数 ／ 3年前の中学校卒業者数 ×100
- 合格率＝ 大学・短期大学入学者数 ／ 志願者総数（過年度卒業者を含む） ×100

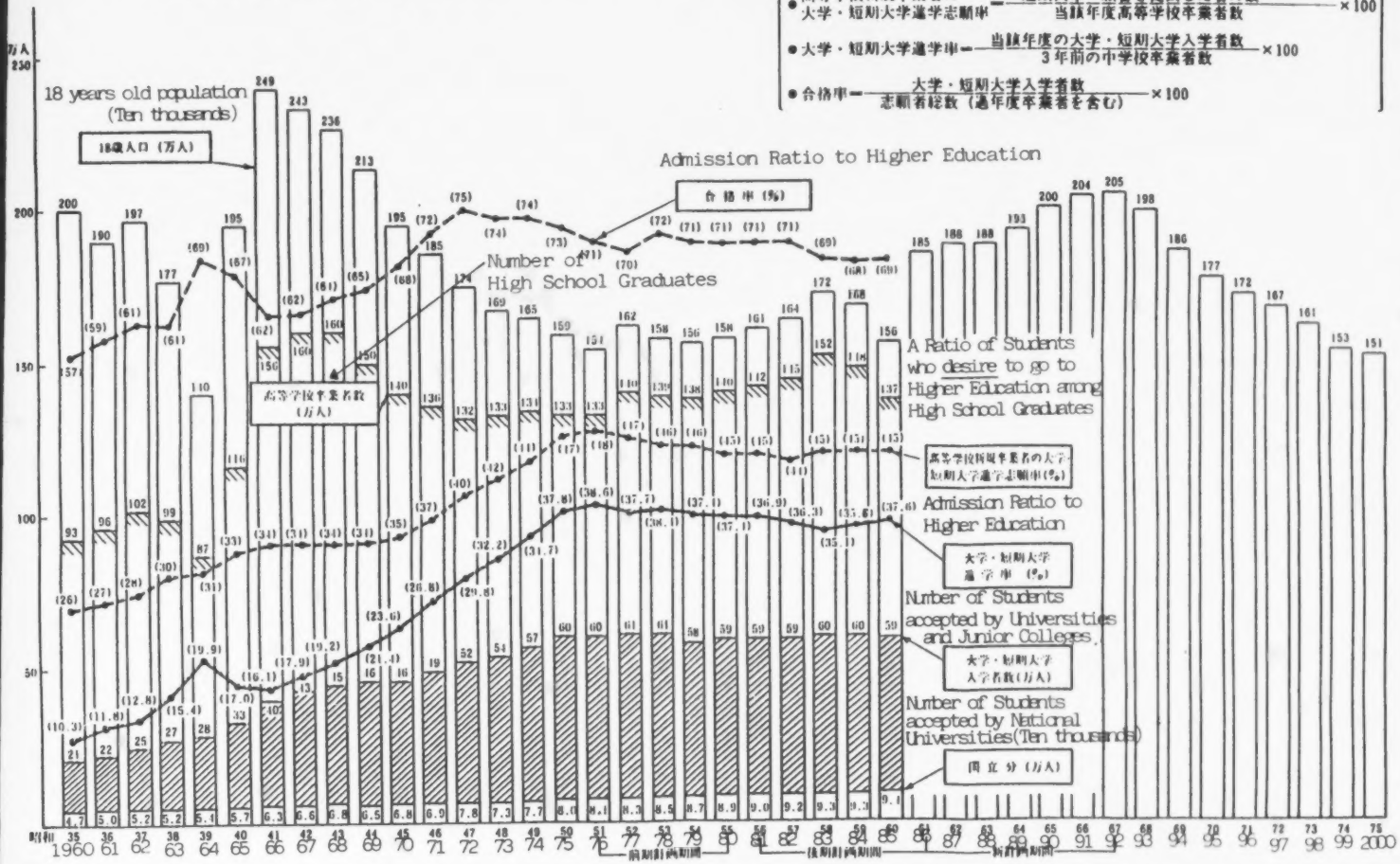

Table I. Characteristics of "the Teacher-centered University" and "the Student-centered University"

	Teacher-centered University	Student-centered University
Value or Goal	Academism (Academic Meritocracy)	Consumerism (Satisfaction of the Consumers' Needs)
Principal Component of the University	Professors (Producers of Learning)	Students (Consumers of Learning)
Identity of the University	Centers of Learning (Academic Community)	Centers of Education (Academic Supermarkets)
Major Function	Research	Education
Professors' Identity	Researchers (Research Professionals)	Teachers (Teaching Professionals)
Students	Supplicants for College Admission, Active Producers of Learning	Customers, Passive Consumers of Learning
Evaluator	Professors	Students
Principle of Curriculum	Academic Discipline	Market Demands
Academic Freedom	Freedom of Teaching Faculty Autonomy	Freedom of Learning Student Choice
Final Power of Institutional Decision-making	Faculty Conference	Student Power

integrating their own education as "active producers".

If we analyze in comparative perspective Riesman's view on these historical reversals which are occurring in the United States, we may find some implications for the future direction of Japanese higher education. In Japan also there are certain signs of a historical transition from the stage of "the Teacher-centered University" to "the student-centered university". "Teacher-centered University" means a traditional university where academics have supreme power over students, which is legally justified and protected by the concept of "academic freedom", that is "faculty autonomy". Because the supreme role of the professor is the producer of learning, research (the production of learning) has been emphasized much more than teaching (the transmission of learning). Thus the recruitment and the promotion of professors are based on their academic productivity and achievements rather than on their teaching ability. The curriculum, requirements to students, and assessments of student performances, as well as admission standards, are also determined by the faculty members' demands and conveniences based on academic disciplines rather than on students' needs and social demands. At "the Teacher-centered university", students are treated as if they were well qualified young adults who have already established definitive goals and as if they were active producers who can design their own curricula and can integrate what they have learned from various fragmented academic offerings given by individual professors without any coordination among colleagues. Thus the faculty find no special need to master any special teaching methods and skills in order to better meet their students' needs.

If "the teacher-centered university" is the traditional model of Japanese universities, there are also many examples of "the student-centered university". At "the student-centered university", the major function of the university is to render service to the needs and interests of students as clients; more emphasis is put on teaching rather than research, so that faculty members are evaluated by students according to their teaching ability. In order to prevent the universities from losing student enrollments, curriculum is organized according to the students' needs and social demands. At "the student-centered university", students are "courted customers" and consumers in nature, who are not interested in designing their own curriculum but in buying only the tasteful offerings and goods which are sold in academic supermarkets. Therefore, curriculum, academic requirements and standards as well as grading and evaluation will all be determined according to the students' tastes and needs. It is the students who evaluate the teachers' ability and effectiveness. The characteristics of both types of the universities is shown in table I.

The following quotation from a campus guide for students issued by a Japanese private college offers a model of "the student-centered university":

It doesn't matter if you haven't yet decided
"What should I become?"
It also really doesn't matter if you don't know
"Why I came to the College."
Because here you have so much time, four years of
campus life, to think about such problems.

Here it is acceptable if you are still wondering
"What should I do at college?"
You shouldn't be so self-conscious because you think
"I am already a college student."
For here is a campus that is always ready to accept you.
From -Y Private College 1984 Campus Guide

We can see how wide the difference is in the attitudes of students between the age of the "student-centered university" and the age of the "teacher-centered university" in terms of their motivation. Many colleges and universities in Japan have increasingly been becomin places occupied by a tremendous amount of students who have neither definite purpose nor strong motivation for academic study before they entered the campuses.

If this type of student occupied a large number of contemporary Japanese campuses, it would be natural that the traditional "elite" concept of the curriculum and teaching in Japanese universities would not be relevant to most of their needs and aspirations, and thus the traditional educational system in the Japanese university would be virtually bankrupt.

In spite of the fact that structural changes in university education are necessary due to great diversity in students' attitudes and needs, almost no fundamental changes have occurred in either the traditional structure of the university or in the professors' attitudes towards university education. Many of the professors who have not been able to attract students to their lectures attempt to find their identity in "research", while students who have found no interest in formal curricula and instruction attempt to find their identity in "extra-curricular" activities. Thus, what can be called "alienation from teaching and learning" among both professors and students exists in Japanese universities. It is not a new phenomenon.

The two types of universities mentioned above may seem to be too simplistic. Indeed existing universities are probably somewhere in between these two extreme models. However, a historical movement from traditional higher education based on faculty dominance over students to a new higher education which is increasingly influenced by the students' needs and tastes has been occurring in Japan as well as in the United States. If we are correct in our assumption that this movement is not just temporary, but an inevitable and historical direction of future society, then the most important problem for the universities should be the challenge of how to adapt to these changes while maintaining their identity as traditional centers of learning. I do not believe that all the universities should move in the

direction of educational service supermarkets for student consumers. However, if universities cannot attract enough students, it is impossible for them to survive if they only adhere to their traditional identities.

Students are the indispensable resources for the university. They are the sources of funds, social prestige, and, everything else they are the raison-d'etre of the university's mission of higher education. Therefore, it is important for us to consider which aspects of the university should be changed and which should be protected and maintained. Eric Ashby has said that the university "could have been destroyed either by resisting pressures to change and so losing its viability, or by yielding too rapidly to change and so losing its integrity".(Ref.9) In an era of increasing social interdependence and rising student consumerism, the survival and development of the modern university is highly dependent upon our finding a good balance between these opposite directions, in short, to provide the possibility for change without sacrificing the integrity of the university.

Finally, historical studies of universities show that the universities which failed to attract excellent students or which had neglected the educational function have never been sccessful in surviving as vital institutions. Therefore the improvement of a universities' curriculum and teaching function is the royal road for their vitality and survival.

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PROBLEMS AND NEW DIRECTIONS OF UNIVERSITY CURRICULUM IN KOREA

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Forty-two years since the Liberation in 1945, the curriculum of Korean universities has improved a great deal in pace with the development of the nation's higher education system itself. Still, the current university curriculum faces many serious problems in its organization and management.

The problem facing university curriculum is particularly serious with regard to its quality and efficiency. There is an urgent need to bring the quality of the university and its curriculum to international standards and to meet the needs of a rapidly developing Korean society.

With this sense of urgency, the present paper attempts to explore the new directions of the Korean university curriculum. The paper will first identify the major problems of the current university curriculm. The paper will then present ways to solve those problems, thusby raising the quality of the university curricula in Korea to the international standard.

I. Problems of the Current Curriculum

The organizational and management problems of the current curriculum can be viewed from the following five standpoints.

First, the problem is related to the exclusive nature of the managment of the curriculum. All disciplines are inter-related with each other. They exist and develop with close relationships with each discipline. However, department-centered curriculum management, professor-oriented selection of subject areas, imposition of excess number of required subjects and fixed time schedules in Korean universities all contribute to the excessive exclusiveness of the curriculum. De facto exclusivity of department-centered curriculum management has created a thick wall between departments. And management in professor centered course selection has created the exclusive climate of academic inquiry between disciplines. Furthermore, the imposition of excess numbers of required courses in each department and origidly imposed daily course schedule by grade level have made it difficult for students to select courses that are consistent with their individual career orientations.

Such tendencies have not only created difficulties in promoting the spirit of cooperation and exchange between discipline areas but also in promoting the freedom of teaching and research. Further, the current rigidity does not allow students to pursue a course of study consistent with their career goals. It is noted here that the exclusive nature of the department-centered curriculum makes it difficult to manage a university which is made of multiple academic departments.

Second, the present system of curriculum is repetitive in content and lacks the interrelationship that is needed in schools and disciplinary areas.

The university curriculum must form the linkage with that of the lower school level i.e. high school, as well as that of higher level, the graduate school level. The university curriculum at the same time must be organized with the linkage with other disciplines. However, the organization of the current university curriculum neglects the importance of such principles. As a result, repetition or redundancy problem of educational content are common in the present curricula organization.

Repetition or redundancy problems of content matters exist not only between high school and university curricula and between undergraduate and graduate levels, but also among departments in the same university and even among disciplines in the same department.

There are many cases where a content area already taught in high school is repeated in the general curriculum of the university. Likewise, a course that needs to be completed at the graduate school level is completed at the undergraduate level. Similarly the same course is offered in different departments of colleges within the same university.

Redundant offering of courses results in extreme ramification of the university curriculum, waste of financial resources and lowering the quality of education.

Although people generally think that student ability is improved if students take as many courses as possible, evidences indicate that there is no significant relationship between the quantity of completed courses and the quality of academic achievement of students.

Third, there is a problem of the curriculum for meeting the current and future needs of the society.

Universities exist within a specific historical and social context. Therefore, the original function of research and teaching of the university is closely related with the demands of the time and the society at large. And then, when this relationship is formed in harmony, does the university deserve to be an institution that leads the society within which it exists.

This is not to say that the university abandons its original functions and orientates itself only to the needs of the time and the society. The curriculum being used in Korean universities is isolated from the reality of the rapidly transforming Korean society, ignores the trends of academic progress and changes in knowledge. Not only is the content being taught in our universities irrelevant and static, thus lacking social relevance, but also increasingly becomes obsolete within the context of academic progress. For example, students may know much about ancient societies but lack knowledge on numerous social issues emerging as serious threats to our daily survival. A graduate of the department of English Literature may understand English poems of the 18th Century but lacks the ability to freely express thoughts in English; and graduates of natural sciences who have been taught mainly by textbooks and the blackboard seem incapacitated in research centers or in the lab. Such reality speaks for the seriousness of the need to reorganize the current university curriculum into one which can better meet the impending demands of the time and the society at large.

Each discipline within a university must make a serious effort to comprehend the flow of changes and trends through scientific inquiry. Only then will the urgency of the need to organize a new curriculum, firmly based on an overall linkage between educational content and the changing demands of the society be loosened.

Fourth, the problem is related to the problem of excess uniformity of curriculum organization.

Each university has its own characteristic depending on its founding mission. Each university must exist with characteristics unique to the locality within which it is located. The curriculum of each department therefore must be organized and managed to be in line with the particular characteristics and specialities unique to each university. Further each curriculum must represent characteristics unique to each department and to each university.

But the curriculum of the Korean universities tend to be excessively rigid and uniform without due regard for the characteristics of geographical uniqueness of a university. For example, if a department of horticulture in a university organizes and manages a curriculum on fruit cultivation, a similar department in another university may specialize in vegetable cultivation. Similarly, if a curriculum of a university is strong in theoretical orientation, another university may emphasize application aspects. (the reality in Korea is that it is difficult to find departments which manage a specialized curriculum that is uniquely different from other programs.)

That is, departments of horticulture and education in the nation all offer virtually the same programs, without any significant differentiation. Of course, this is not to say that the emphasis of specialization would mean the neglect of requisite general or liberal courses. It is important to strengthen basic courses. At the same

time, it is also necessary to build courses and laboratory course, of particular specialization unique to the university or the locality within which it is located.

Meanwhile, the problem of the uniformity of the curriculum is closely related with the students for which it is targeted. For example, a curriculum which is targeted at students desiring to become judges and public prosecutors, and which has over 40 percent success rate in the judicial examination, should be fundamentally different from the curriculum whose students either rarely pass the examination or pursue different types of careers. If the latter manages a curriculum which is the same as that of the former, it would only be at the expense of the students. The problem of uniformity is true also with foreign language education. More diverse courses should be offered considering the importance of the people trained in different languages particularly with respect to the ever expanding scope of international exchange. This would mean a departure from traditionally uniform English, German, French oriented foreign language education.

Fifth, the problem is related to general courses and the type of completion requirments.

At least three problems can be pointed out concerning general education being completed by students in each university. The first is that the content being taught in liberal arts subjects is highly redundant with the content of the school curricula. In some cases, the content matter taught in a university is more trivial and at a lower level than what is taught in high school.

Another problem is that a balanced liberal arts curriculum is not being offered. According to a research result, the completion ratios of liberal arts curricula in the universities of the nation are 75.1% in humanities, 4.7% in social science, and 20.2% in natural science. It can be seen that social science is clearly being neglected. There is no room to offer or true liberal arts type of education if one exempts language courses and legal courses.

Still, another problem in the liberal arts education is excessive concentration in the freshmen year or early years of its college. This problem, along with the problem of redundancy, brings dissatisfaction and dislike of university life among students.

Also, concentration bound method of completion is undesirable in terms of the organic relation between educational effects and required courses. In addition to the above problems, there is the problem of the organization related to the faculty. The faculty involved in general education courses largely lack practical experience and in many cases part-time lecturers are used. This type of faculty organization does not guarantee the quality of general education.

Besides aforementioned problems, there are other problems related to: the ratio of general arts courses vs. major area courses; the

operation and organization of the curriculum; and teaching methods. These problems will not be elaborated here due to limited space.

II. Basic Directions for Improvement

In order to solve the problems discussed in previous sections and to organize and operate curriculum effectively corresponding to the needs of the Korean society, I shall present several basic directions towards the improvement of the organization and operation of the curriculum.

First, the curriculum should harmoniously embody the two ideals of social service: the cultivation of the individual with ability and attitude for searching for truth and fostering competent professionals. That is, we must try to organize and operate a curriculum which maximizes the ideals of the academic community and the ideals which emphasize technical vocational education conforming to the Geselshaft.

In the contemporary society, 'being academic' means a maximum guarantee of objective search for turth, which is based upon university autonomy, rather than a complete abandonment of vocational education. In this regard a concentration area which is one-sidely oriented toward technical vocational education should comprise the content which emphasizes and cultivates general education as well as an attitude of academic inquiry. Therefore, a newly organized curriculum should be the one in which academic and vocational aspects harmoniously coexist.

Second, newly organized curriculum should break the barrier and exclusivity among academic departments by organizing a comprehensive curriculum. This means that we need a change from the operation system in the closed department-centered curriculum to that of the open curriculum which realizes interdisciplinary collaboration and commonality. Re-organization of curriculum as such is likely to prevent individual colleges within a university being isolated from each other. Also the department-centered credit completion system should be converted into a course-centered one, in order to assure that an open and mutually beneficial exchange among major areas or academic departments becomes possible.

Third, the reciprocal openness among disciplines can be possible by reducing the number of required courses and increasing that of elective courses. A sharp reduction of the currently excessive number of required credit hours for graduation and conversion of required courses to elective courses can allow students to freely choose courses consistent with their career objectives. For instance, those who want to advance into graduate schools should be allowed to take more courses related to their major while those who want to be employed upon graduation should be allowed to take courses in their minor areas related to their occupational aspirations. Students should be alowed to have more choices in taking courses by reducing the number of required courses in their major fields of study. For

example, if students are required to take 50 courses in their major field for graduation, they can be allowed to take at least half of these courses as elective courses in their major fields. In order to solve some of these problems, the current practice of offering courses based on the availability of professors should be avoided. Also, the currently practiced system of fixed student time table by year at college or by departments and colleges should be changed into that of a comprehensive time-schedule which is not bound by students' year at school or the department to which he/she belongs.

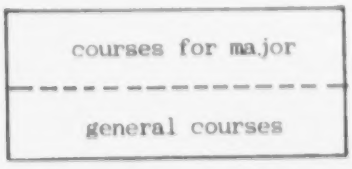
Fourth, the curriculum should be organized with consideration for an effective linkage. Linkage in curriculum is required from both vertical and horizontal points of view. Vertical linkage implies a relationship among high school, college, master and doctoral programs while horizontal linkage implies a relationship among colleges, within a university, among academic departments within a college, as well as courses which assume mutual openness and cooperation systems among disciplines. Ensuring an effective vertical linkage of curriculum can help prevent excessive specialization of undergraduate curriculum. On the other hand, an organization scheme ensuring linkage of the curriculum will help develop interdisciplinary fields of study and promote the spirit of cooperation among academic disciplines.

Similarly, the problem of same content being taught at different levels of schools and related problem of repetition should be throughly minimized. In this sense, integration of similar subjects is inevitable. The integrative effort should be examined scrupulously by framing a syllabus of courses and should be put into practice with co-operation of each department involved.

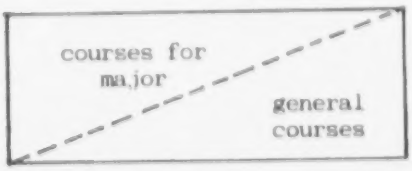
Fifth, concentrated completion of general courses is to be changed into dispersed type of completion.

As shown in the figure below, concentrated completion type of courses should be changed into dispersed type and major area courses be shifted down to earlier years of the university. And general courses, except basic and instrumental courses, should be shifted up to later years of the university.

Model of concentrated completion



Model of dispersive completion



This suggestion stems from the fact that the curriculum of modern higher education should strengthen the linkage between general courses and major courses, which is in line with the trend of specialization of general education and generalization of specialized education.

If the model of dispersive completion is adopted, departments of general subjects should be re-organized and the composition of the faculty in charge of general subjects must be formed into a department-centered organization.

Meanwhile, taking this model of completion, students might obtain credits while maintaining the relationship with major subjects. At the same time, student dissatisfaction on general subjects may also be alleviated to some degree.

Sixth, each university should organize and manage the curriculum with unique characteristics.

The curriculum of each university must be organized in line with its own characteristics, regional uniqueness and the appropriateness to need. An academic departmnt in a university certainly cannot emphasize all territories of the field. Therefore, curricula of universities should be diversely organized and managed in accordance with the characteristics and uniqueness of the university appropriate to the needs of target students and the uniqueness of the region.

At this time, foreign language subjects should also be offered so that students can choose courses freely in line with their areas of interest. As far as the required courses are concerned, students should be allowed to select other language courses, with the exception of English as a subject, freely in accordance with his/ her major and career interests.

Seventh, in organizing curriculum, considerations should be given to education methods and educational facilities.

In other words, teaching methods and educational facilities must be preconditions of curriculum organization. If either the method of instruction is inappropriate or the facilities are inadequate, no curriculum can be managed effectively and efficiently as intended.

For example in the case of natural science, which belongs to the general subjects category, if the faculties of physics, chemistry, biology and physical geography are unable to preplan and cooperate with each other, it is better to separate these areas as independent departments. Even from the viewpoint of educational effect, the organization of all curricula must consider its operational aspects because the organization and teaching methods are mutually complementary to each other.

In summary, the new curriculum should be organized and managed harmoniously with both academic and vocational aspects to the maximum.

1) Major subjects-centered management of curriculum that is exclusive to other subjects should be transformed into more open type of curriculum management based on sequence of disciplines in order to realize interdisplinary linkage and commonality.

2) By reducing the excess load of required courses and increasing elective courses, students should be allowed to select freely the subjects consistent with their own career aspirations.

3) Organization of the curriculum must maintain inter-disciplinary linkage by eliminating the duplication of content matters being taught.

4) Rational management of general education is to be pursued by transforming a concentrated completion model of general subjects to a dispersive model.

5) Each university should try to manage the curriculum with its own characteristics and uniqueness by avoiding the uniformity of the curriculum organization.

6) Serious considerations should be given to teaching methods and facilities in organizing the curriculum.

TOPIC V

TEACHING METHODS AND EDUCATION TECHNOLOGY FOR UNIVERSITY

Problems of Teaching Methods in Korean Higher Education
Educational Technology for Improving University Teaching

PROBLEMS OF TEACHING METHODS IN KOREAN HIGHER EDUCATION

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I. Introduction

The quality of education in a college can be analyzed in various ways. It can be evaluated not only by the adequacy of subject matter given but also by the appropriateness of students' experiences in the college. It also can be evaluated by the degrees of contribution to society. However, it seems more reasonable to question the quality of education in terms of students' experiences rather than curriculum documents. In fact, curriculum documents, faculty members and supporting systems in a school do not tell us precisely anything about the quality of students' experiences. These components have only potential value in determining the quality of the stuents' experiences.

Desirable qualities of educational experiences are characterized by relevancy, intrinsic motivation, encouragement of creativity, exercise of reasoning, cooperation, and integration (Dressel and Marcus, 1982). Educational experiences can be desirable when they are integrated into a whole to attain relevant goals, when they encourage students to examine thought processes, and when they enhance intrinsic motivation.

In designing learning experiences, the teacher determines objectives, contents, procedures or methods, and media. While objectives and contents of a subject matter become cornerstones for teaching-learning activities, the methods and media as delivery systems determine the mode of experiences. For example, when we teach the concept 'pressure', the application of an expository mode of teaching may stimulate the student to memorize it while the discovery method of teaching encourages hypothetico-deductive processes of thinking.

This presentation will focus on the problems appearing in teaching methods and will suggest some tasks for the improvement of teaching practices in colleges.

II. Analysis of Problems

1. No best way of teaching can exist over times and across disciplines. Any teaching method we can list has limitations as well as advantages in the effectiveness and practicality. We can not judge a method to be 'good' or 'bad' without considering the characteristics of the learner and the nature of learning tasks. Certainly, the advantages and limitations of certain teaching methods are specific to the learner and the goals to be achieved.

At the undergraduate level, students are mature cognitively and affectively. However, there are many different disciplines to be taught in colleges. The goals of the subject matters vary from simple skills to higher mental capabilities. It is not difficult to assume that most objectives of a subject matter at college level showed be promote higher mental processes, integration of knowledge and skills, and a self-directed personality. There, of course, are simple knowledge and skills through which more complicated higher capabilities can be attained. In this respect, instructional methods or procedures applicable to college teaching can be varied.

Generally speaking, expository methods such as lectures have lower priority in college teaching. However, the mode of teaching prevailing in colleges and universities is the lecture. A survey(Whang, et al., 1986) estimates that approximately 64 percent of college classes are operated by lecture which is a one-way communication. The percentage goes up higher in general study classes. Korean Council for University Education(KCUE, 1986) reported that about 75 percent of Korean language classes were mainly instructed by lecture.

The lecture method has some limitation as well as advantages. It is economical in terms of time and materials and has the advantage of increasing the accessibility of especially competent leaders. However, it has been criticized for a long time on the ground that it encourages retention of facts, that it fails to give room for interaction between teacher and learners, that it leads the learners to accept the teacher as the final authority, and that it makes learning a boring.

For a moment, let us look into a study by Jung-Kyu Whang and his colleagues in 1986. The study was to investigate students' perception about the teaching acts of their professor in a certain course. From 111 colleges and universities, 1100 students were randomly selected for the study. The subjects were asked to respond to a questionaire of 5-point scales, according to their perception of a professor's teaching behavior during a course taken. Some of the results are shown in the Table below.

contents of question	negative responses(%)
utilization of discussion & students' active participation	55
clarity of reading assignments	34
feedback from the teacher on their performance	57
suggestions for specific references	64
use of AV materials	79

* In the calculation, the responses on the neutral point of the scales were considered as positive ones.

The results in the table reveal the facts that many professors are adopting a one-sided communication method as a teaching strategy and willing to accept the whole responsibility for student's learning.

2. Why has the lecture become the most widely used teaching method in higher education? First of all, a tradition made it impossible to avoid the one-way communication in the classroom. Most teachers as well as students seem to believe college teaching as traditional lecture. Lectures were popular in the medieval universities during the 15 century when books were not available to all the class members. In spite of the technical advancement in communication media today, most professors continue to lecture partly because of tradition and partly because of certain assumptions about the method(Hoover, 1980). One underlying assumption is that lecturing enables the student to experience the process of reflective thinking. Another is that the presentation of facts or ideas leads to independent problem solving by the learner.

In our daily college campus life, we may easily find the professors and students who prefer the term, 'giving lecture' or 'listening to lecture', to the term instruction or learning.

Second, the size of class is generally too large to apply other methods except lectures. A nationwide survey(Whang, et al., 1986) reveals that most classes (87 percent) accommodate more than 30 students. The classes with more than 60 students reach 43 percent, and more than 20 percent of the classes sampled in the study were to have more than 90 students. In the study, 776 classes were selected from 111 four-year colleges and universities throughout the country. With such a large group of students and without any specially designed learning laboratory or instructional system, the mode of instructional processes tends to be a lecture type.

Third, a heavy load of teaching may be one of the problems causing the ineffective teaching-learning processes. In 1982, Ran-soo Kim and his colleagues made a research on the workload of faculty members of four-year colleges and universities in Korea. With 1000 professors randomly chosen, the researchers surveyed the workload in six categories : instruction, counseling, dissertation advising, research & development, administration, and public service. The average workload of the professors was 20.8 credit hours. And the weight of performing classroom teaching amounted to 80 percent of the workload. A similar tendency was found in another study(Whang, et al., 1986). The subjects of the study were 200 faculty members of four-year colleges and universities. The results of the study showed that about 70 percent of the professors were spending 9 to 15 hours of classroom teaching every week. And approximately 13 percent of the professors were responsible for instruction of more than 15 hours per week. The researchers also found that more than 76 percente of the professors were responsible for 3 to 5 courses, and 6 percent of the

sampled subjects charged themselves with more than 5 courses.

It can be estimated that most professors are responsible for 150 to 250 students accommodated in their classes. Such a great number of students may disable the professor from doing anything but lecturing. In an experimental study(Kim, et al., 1983) on teaching methods in a university, the professors who had participated in the experimentation mentioned that, under current the situation, it might be very difficult for college teachers to perform systematized formative evaluations. In the experiment, immediate feedback to students concerning their performance on tests and assignments was almost impossible because of limited time. During the experiment, it was very difficult for the experimenters to get help from other personnel of the university. The number of teaching assistants was limited and other professors were also busy doing their work.

Fundamentally, this problem stems from the insufficiency of faculty resources. KCUE(1986) reports that, in four-year colleges and universities of 1985, the faculty-student ratio amounted to 1:35.7. If we want to increase the ratio up to 1:20, about 16,640 faculty members should be recruited. In 1985, the total number of professors in four-year colleges and universities was 21,185.

Fourth, educational efforts for the development of instructional systems have been very limited. For the time being, it is very hard to find an elaborated instructional system for higher education in Korea. This is especially true in the fields of social sciences and humanities.

In fact, the class-size may not be a crucial factor in determining methods or procedures of teaching. In turn, some strategies can accommodate a large group of students. For example, a botany course by the Audio-Tutorial Approach method can accommodate more than 200 students. The personalized System of Instruction(PSI) in the United States also accommodates a large group of students. PSI consists of a set of learning units, each with its own mastery test. Teaching assistants administer the tests whenever the learner feels he or she is ready. As a system for self-paced learning, PSI is common in psychology, engineering, physics, and other fields where subject matter mastery is critical.

Fifth, teaching-learning materials are not sufficient for practicing a variety of activities in the process of instruction. The Statistical Yearbook of Education(1965-1985) shows that, as of 1985, one seat in the college libraries is supposed to be used by 5 students on the average and the number of books per student is 13.9. The problem is a poor accessibility to materials or information necessary for teaching and learning. Recently, many colleges and universities have established learning resources rooms as branches of libraries to provide reading materials. However, in many cases, the amount of copies reserved in the branches is insufficient to satisfy all the needs from students.

Along with the library systems, some of the universities and colleges have AV resoure centers in order to facilitate the use of non-print materials in the classes. However, they function to a limited degree, because of a shortage in coursewares and indifference of teachers to audiovisual materials.

III. Future Tasks for Improving College Teaching

1. Development of Instructional Systems

According to Banathy(1968), systems can be defined as deliberately designed synthetic organisms, comprised of interrelated components which are employed to function in an integrated fashion to attain predetermined purposes. In instructional systems, the purposes can be the very objectives of a course or a lesson. Components of instructional systems may be person and communication media which enable the learner to involve in the process of learning. Procedures or strategies of teaching will integrate the components in an orderly way to attain the system objectives.

Currently, the students in colleges and universities utilize a course syllabus distributed by the professor at the beginning of a course. The syllabus describes goals of the course, contents & methods, assignments, and references. However, the syllabus may not fully function as a guide for learning because it does not describe specific objectives and tasks under each topic. And the materials suggested in the syllabus are sometimes inaccessible for the students. As a matter of fact, for many students, only one textbook is all he has to read.

Regarding the present conditions of higher education in Korea, low-cost materials or systems should be developed. For teachers, the development of instructor's manuals and necessary teaching materials can be recommended. An instructional manual for a course should include, on topic basis, specific objectives and contents, schedule of teaching-learning activities, and test items. This manual will function as a guide for the instructional behavior of the teacher and will also contribute to the elaboration and development of the college curriculua. In addition, instructional materials may be developed for use in the classroom according to the instructor's manuals. For students, textbooks as a learning guide can be designed in connection with the instructor's manual. The textbook will contain, on topic or unit basis, specific objectives, reading materials, suggestions for further activities, and tasks for exercise. For the enrichment of learning experiences, other materials besides the textbook may be developed in the form of audiovisual or programmed material.

In the development of certain instructional systems, urgently needed is cooperation among professors. Because the collaborative work will produce more valid and practical systems, and because such instructional systems can be easily adopted and implemented by the participants. Actually we will be encountered with problems of diffusion when an innovative program is offered by other people. The

adoption of innovations will not take place until the users become fully acquainted with the innovative ideas. Such a cooperative work will also have some training effects on the faculty members in the areas of curriculum development and instruction.

2. Strengthening the Supporting Systems for Teaching

In colleges and universities, library and learning resource centers are expected to provide materials and information for the professors and students. However, the service function of such institutions is far behind our expectations. That is, our accessibility to the needed materials is very limited. Frequently, we have difficulties in finding information we need. Ideally speaking, a university library must have all the materials and information from all the areas of disciplines, and it can adapt to the user's needs in terms of time of information search and acquisition. For a library to perform this job at an optimum level, financial supports must be increased for the acquistion of books and other materials. At least, it should be fully equipped with the curriculum materials for effective teaching and learning. And it will be necessary for the library to establish a computerized retrieval system for research information. And in order to level up the students' accessibility to the learning resources, reference rooms or curriculum resource centers should be established on the basis of disciplinary fields. The resources room are supposed to reserve a reasonable amount of the curriculum materials to satisfy needs.

Besides, we can think of an audiovisual center which handles non-print materials for teaching and learning. For effective use of audiovisual materials in classrooms, the center, if any, should provide coursewares for professors and students. Also the center can afford to give technical assistance to the users when the utilization of the materials involves a machine.

3. Activation of Research on Teaching and Learning

Although there have been a lot of research activities in the area of college education, little is found on the methodology of teaching at college level. Probably, the first intensive inquiry for college teaching in Korea may be the international seminar, The Pursuit of Excellence in Higher Education, held in 1979(Synn, 1980). In the seminar, theoretical frameworks on the teaching-learning process in college teaching were presented and discussed. Since then, many professors have shown their interest in college teaching. In their researches, some variables such as presentation of specific objectives, formative evaluation, question-answer practice, utilization of assignment, and practice & drill were chosen for inquiry. And they have performed experiments in classroom setting to determine the impact of these variables on achievement level and learning habits of students. This type of study must continue to clarify the effects of specific teaching acts on students' learning.

However, our research interest may broaden to the professors, students, and school environment. This is because of the fact that the mode of teaching can be determined by the interaction among teachers' capabilities, students' characteristics, and available teaching resources. A survey can be made on attitudes and value orientation directly related to the behavior of teaching and learning. The results of such a survey will be useful in determining faculty training program if necessary and in determining the directions of student guidance and counseling. Any malfunctionings of supporting systems within a school can be clarified through research. A systematic diagnosis of the problem will suggest a possible remedy.

IV. Conclusion

Any component is responsible for the ineffectiveness of teaching-learning process in colleges. For excellent teaching, the teacher must be fully supported in terms of time and materials. Without providing an appropriate condition for teaching, the possibility of practicing good quality teaching will be very limited. However, the human factor in educational setting is one of the most important variables because the planning and management of school experiences can only be done by human beings. Effective teaching can be guaranteed only by the teacher who desires to be excellent as a teacher.

As a concluding remark I would like to quote the opinion of Dressel and Marcus(1982).

"My awareness of human frailty makes it impossible for me to assume that a professor should have complete autonomy in development of courses, the means and processes by which they are offered, or the grading of students who take them. There are many pressures from many directions on every citizen in a democratic society. Professors are not exempt".

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EDUCATIONAL TECHNOLOGY FOR IMPROVING UNIVERSITY TEACHING

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I. Educational Technology Now

In Japan the meaning of "Educational Technology" is understood in a variety of ways. Some regard it as technologies for the educational use of media and others consider it as a systematic approach to design, to implement and evaluate educational processes including instruction as well as management.

In the 1970s, the topic was widely discussed, but nowadays, it seems that the following goals are generally accepted among Japanese researchers and educators. (Sakamoto, 1987)

1. To pursue an optimal combination of the components both in the teaching-learning processes and in the instructional management processes.

2. To develop and use the technologies, media and systems that are most useful for implementing these optimal combinations.

3. To organize the technologies, media and systems as a science of technology concerning instruction and management for instruction.

Educational Technology is now broadly understood as the above, but in this paper the focus of discussion will be limited to the use of communication technologies such as VTRs, microcomputers, broadcast, and other media.

II. Use of VTRs and Educational Video Software

Audio-visual equipment and devices such as OHP, slide projectors, model and VTR are widely utilized in university teaching. One of the most systematic projects for using video software is undertaken by the cooperation between a group of university professors and the National Centre for the Development of Broadcast Education (National Institute for Multi Media Education). Nine university professors in charge of teacher education organized a study group for the development of educational media in teacher education in 1984 and produced the first series of seven video softwares for teacher training courses under the financial, technical and administrative support of the above center in 1985. As these nine professors were representatives from four

different kinds of association related to pre-service teacher education in universities, the series of video software was produced on the basis of needs, opinions and suggestions from many professors responsible for teacher education.

The content of video software was determined by more than 500 answers to survey of professors nationwide and pilot programs were reviewed at the conference of professors concerned and reedited according to their opinions. Moreover, responses from students were collected in 55 universities and the final versions were completed. In 1987, nearly 20 video softwares were delivered to more than 100 universities through the Society of Promotion for the University of the Air Education. Series such as "Days for Teaching Practice," "Teaching by a Student Teacher" and "Teaching by an Experienced Teacher" are widely utilized.

As professional TV directors and technicians from the center participated on the production team, the quality of products is as high as those for broadcast.

A VTR is also utilized for video confrontation in microteaching. Since 1971, a simplified version of micro-teaching has been undertaken by all students who wished to take the teaching practice course (Sakamoto, 1981). Each student gave a part of his/her lesson for three minutes in front of his/her classmates who played pupils' roles. Each teaching session was recorded by VTR and played back afterwards. All the students and the instructors pointed out each one's weak points in teaching both by discussion and by checking the evaluation sheet. Their instructional design was then rearranged and the students gave their revised lesson.

Figure 1 shows the improvement of teaching rated by professional teacher observers. In contrast, there was no improvement in the group in which students repeated their teaching without any feedback by VTR and evaluation sheets. After viewing other student teachers' teaching on VTR and pointing out their weak points, a student can improve his/her own teaching without viewing his/her own teaching by VTR. This means that there is some economy of time.

Figure 2 shows the results of the line-connecting content analysis of teaching, rated by pupils in high schools, when student teachers, trained by micro-teaching, taught them in the teaching practice course. This shows the effectiveness of micro-teaching on the teaching practice in the classroom. Figure 3 shows the same sort of results from the students without any feedback experience in micro-teaching. The distinctive characteristics are that explanation was sufficient and easy to comprehend in the former and that explanation was fast and students were not motivated.

In addition to video confrontation and feedback from evaluation sheets, model teaching observation and verbal descriptions of model teaching are also effective factors to improve student teachers' teaching.

Video confrontation technique is also applied for practicing paper presentation for academic society. Special benefits would be larger for young researchers like graduate students and research associates.

III. Use of Microcomputers

Microcomputers are useful tools for university educations. Tools for teaching, tools for evaluation, tools for retrieving academic information from data bases and tools for educational administration are examples of application. As far as teaching is concerned, tools for teaching such as CAI, and tools for evaluation such as computer aided instructional improvement can be utilized. However, cases of those applications are very few for university teaching at the moment. Among them, the Kanazawa Institute of Technology is one of the most successful examples in applying CAI to university teaching. 158 16-bit microcomputers are set and students can individually study a variety of courses from English to engineering.

Microcomputers are also utilized to give prescriptions to professors for improving teaching. Table 1 is an example of a lecture evaluation sheet which is checked by students. Table 2 is an example of output to a chemistry professor. Many points are listed on the basis of students' responses. By considering these points, professors can improve their lecture. (Sakamoto, 1980)

Microcomputers are, moreover, utilized for improving educational TV programs. Six different versions were produced on the same topic in the University of the Air pilot TV program development project in 1984. The topic was "The World after Death - Heaven and Hell" in the 12th program of the series "The Theories and History of Religion". Six versions were (1)studio lecture, (2)classroom lecture by one camera, (3)classroom lecture by 3 cameras, (4)lecture from the field, (5)documentary by the professor's narration and (6)documentary by an actor's narration. Students pushed corresponding buttons when they felt the segment understandable, interesting, not understandable, and not interesting. Their responses were collected and presented as graphs on the programs by a microcomputer. Table 3 shows the main results. It is shown that "Documentary" and "Studio" versions were more understandable and "Documentary" and "Lecture from the Field" were interesting, but "Classroom" Lecture was less interesting. Similar results were also gained from the questionnaire to the same students. Professors and TV directors can improve their educational TV program by investigating these graphs.

IV. Distance Teaching

1. Use of Broadcating

(i) Use of Radio in Correspondence Courses

Formal correspondence courses were started in 1947 at two private universities (although in 1885 a university had sent copies of lectures to extension students); approximately 5.0 percent of all university and college students are now studying through the regular correspondence courses of 12 private universities (6.0 percent If students of the University of the Air included), and 10 private junior colleges. The numbers are, respectively, 96,269 (5.1 percent of all university students) and 17,212 (4.3 percent of all college students).

Use of radio in correspondence courses began in 1958 at Keio and Tamagawa Universities when they began broadcasting their own programs through commercial stations. However, only Keio University is still broadcasting these radio lectures. Then, NHK began to broadcast university correspondence lectures by radio in 1961 and by TV in 1965. Some universities recognized that students study from broadcast programs and conducted their own guidance and evaluation in connection with these programs. Unfortunately, however such broadcasts are not being undertaken now. It seems that NHK is reluctant to ask professors at these private universities to appear on the air.

In 1976 a project for studying the effective use of radio in correspondence courses was begun, supported by the Ministry of Education, Science and Culture, and since 1978 the same project has been continued with the cooperation of the National Centre for Development of Broadcast Education.

In 1984, five series of 13 45-minute radio programs were produced and broadcast for five correspondence courses, i.e., ethics, sociology, biology, economics and psychology.

In 1986, a series of four 30-minute educational radio programs and their tutoring programs were broadcast for students in correspondence courses in private universities and colleges every Saturday and Sunday. There are courses in literature, law, mathematics, economics, biology, ethics, sociology, geology, psychology, philosophy and geography.

(ii) University of the Air

Since 1969, several governmental committees have presented ideas, basic guidelines and a master plan for the University of the Air. Parallel to this development, from 1971 to 1977, various sorts of pilot radio and ETV programs have been produced and broadcast. The total number is 30 radio series and 56 TV series (not counting re-runs). Several surveys estimating educational needs and studies of the effectiveness of such programs have also been conducted.

In 1978, the National Center for Development of Broadcast Education was established as an institution to be generally available for cooperative studies on the use of broadcasting in university teaching. This Centre has investigated the possibility of management and implementation of the University of the Air and now serves as the core of the University of the Air which was estabished in 1983.

The Center produced and broadcast 82 pilot series for ETV and 60 pilot series for radio from 1978 to 1984. Each was composed of 15 45-minute programs. Some of these are now or will be broadcast as part of regular courses in the U.A. In the University of the Air, radio and television are widely used in order to provide a wide range of university level educational opportunities.

The TV and radio programs are produced through the cooperation of professors or guest professors in the U.A. and program directors of either the U.A. or the National Center for Development of Broadcast Education. Radio programs are broadcast daily from six o'clock in the morning to midnight. In 1986, seven series for basic, nine for fundamental, 14 for foreign language, and 48 for senior courses were broadcast. One hundred eighteen courses are studied by 102 series of 15 45- minute ETV programs once a week and 16 series twice a week. In the University of the Air, all six study centers have audio video cassette tapes for all series of radio and TV broadcast programs and serve them for reviewing. According to the survey by the center, 0.3 to 3.2 percent of students recorded radio programs or 0.9 to 5.7 percent recorded TV programs for their home study.

In the first year of the University of the Air, 67 per cent of 1,022 respondents to the survey by the center watched and listened to broadcasting programs between 9:00 p.m. and 12:00 midnight

The University of the Air started to use FAX for tutorials to individual students. In the eleven courses such as English, French, Management and Administration, Dwellings and so on, 1,300 students can use this system. Professors are staying in the study center or headquarters on a special day of the week and respond immediately to questions from students by FAX. But very few students asked questions by FAX. Japanese students do not always communicate actively.

2. Technological Innovation In Remote Classroom Teaching

The Tokyo Institute of Technology set up a lecture transmission system utilizing optical fibre covering 26.4km between its main campus and remote campus in 1983. This system uses one pair of lecture rooms, one pair of conference rooms, and 29 study guidance rooms. Large-scale distance teaching is undertaken between the pair of lecture rooms and small scale distance teaching is done between pairs of remote study guidance rooms. Students feel the system is convienient. FAX is also utilized for the campus information optical network system There is one FAX each in two lecture rooms, two conference rooms and 29 tutorial rooms. We exchange printed information by FAX.

Figure 4 shows the features of a lecture room and instructor's desk and the construction of a terminal in a tutoring room. The professor can teach by using chalk and blackboard, VTR, slide, OHP and overhead camera. The scene in a lecture room is transmitted to two large video screens in another lecture room. The scene in another lecture room is reversely seen in two monitor TVs in front of the

professor. Therefore, the professor and students in two lecture rooms can communicate with each other. In a tutoring room, a professor can discuss with and teach a graduate student at a distance. Both can see either each others' face or materials transmitted in a TV and also monitor images being sent in a small TV. The cost of hardware is approximately Y1.1 billion ($7 million), including the cost for restoring the rooms but excluding the cost of building.

V. Recent Trends in University Extension Courses

1. Use of Radio and TV in University Extension Courses

In 1986, supported by the National Center for Development of Broadcast Education, seven national universities, i.e., Tohoky, Kanazawa, Hiroshima, Osaka, Kumamoto, Hokkaido, Nagoya, Shinshu, Kochi and Ryukyu University produced and broadcast a series of 13 45-minute programs for university extension courses, of which 11 used TV and 8 radio. The first three universities joined this project in 1978. In 1983, six universities broadcast eight series of TV, and six series of radio programs. In total 3,620 students participated in the university extension programs, and 1,792 (49.5 percent) answered questionnaires. 46.2 percent watched and listened to over 80 percent of the television and radio programs. 16.4 percent studied textbooks every week and 28.9 percent usually studied. 45.5 percent reported that their expectations were met. In 1985, a total of 6,352 students participated in programs run by ten national universities.

In the University of the Air, the public can freely watch ETV and listen to radio programs without enrolling in the university as well buy the relevant textbooks in book stores. It is assumed that many people study broadcast programs sponsored by the U.A..

2. HiOVIS

HiOVIS (Highly Interactive Optical Information System) was developed in 1987 and has been implemented by MITI (Japanese Ministry of International Trade and Industry), VISDA (Visual Information System Development Assocation) and private enterprises. Now the management and implementation is transfered to a CATV company. 156 homes and the HiOVIS Centre are connected by optical fiber. The total length of fiber is approximately 350km. As each home has one camera, one display panel, and one keyboard, they can communicate reciprocally. The HiOVIS Center can transmit information through 29 channels simultaneously: nine for TV retransmission, one for TV studio broadcasting, seven for video request services, seven for still picture service,and five for other services.

Among this variety of services are social education courses supported by the National Center for Development of Broadcast Education. This series of courses was called the "Citizen's University Course." Three courses were transmitted to monitors: "Theories and History of Religion", "Education and Society" and

"Computer and Society". The first two were taken from the series produced and broadcast as part of the U.A. pilot TV programs. The last one was an original production. 14 monitors answered a questionnaire concerning the program "Education and Society". 64 percent reported that interest in the topics was high, but 57 percent reported that these programs did not utilize the merits of two way communication.

VI. Concluding Remarks

The utilization of educational technology both in terms of software and hardware is advanced at the primary and secondary school level in Japan, but many difficulties still remain in the utilization of educational technology in higher education (Sakamoto, 1980).

The first is the lake of interest and desire for instructional improvement among university professors. The second is the fact that practical studies are undervalued in the main streams of educational research in Japan. Many educational researchers are more interested in historical and philosophical studies on education than in empirical studies. Even in the latter, most of them are more interested in purely academic research than practical studies for improving education by means of educational technology. The third is the lack of value attached to it by academic society generally. Though some researchers in various disciplines are conducting studies on teaching in their own field, these studies are not internally valued and mostly irrelevant to their promotion. The fourth is the difficulty of the empirical research itself. As the educational processes involved are quite complicated and uncontrollable, it is difficult to understand the exact causes and effects of instructional improvements even if they occur. The fifth is the lack of research funds. Some sorts of research and development on computer use in education require a large amount of money and personnel. Those conditions are difficult to be gained in ordinary higher educational institutions. Recently the interests of professors in teaching has been gradually increasing. VTR, Videodisc, OHP and microcomputers have been utilized in several universities, though the number of cases is not still large enough.

However, there is no way other than accumulating the facts and experiences gaine from a systematic approach to design, to implement and to evaluate tactics and strategies for improving actual educational processes.

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Table 1. Your Impressions on this Lecture (example)

What do you think about this lecture?
Please select one of three mutiple choice categories in each item and mark the number of the corresponding column in the mark sense card.

Attribute of Lecture

1. Structures of the curriculum	1. ill-defined	2. neutral	3. well defined
2. Organization of the lecture	1. confused	2. neutral	3. systematic
3. Relevance to other subject area	1. irrelevant	2. neutral	3. relevant
4. Weight of content	1. light	2. neutral	3. heavy
5. Treatment of content	1. theoretical	2. neutral	3. practical
6. Coverage of essential points	1. insufficient	2. neutral	3. sufficient
7. Logical development	1. illogical	2. neutral	3. logical
8. Introductory summary	1. absent	2. neutral	3. present
9. Cumulative development	1. absent	2. neutral	3. present
10. Supportive evidence	1. absent	2. neutral	3. present
11. Rigour of explanation	1. weak	2. neutral	3. strong
12. Original style of presentation	1. absent	2. neutral	3. present

13. Handouts
1. few 2. neutral 3. many

14. Time to take notes
1. insufficient 2. neutral 3. sufficient

15. Force of appeal
1. weak 2. neutral 3. powerful

16. Speed of presentation
1. slow 2. neutral 3. fast

Effectiveness of Lecture

17. Content of the Lecture
1. incomprehensible 2. neutral 3. comprehensible

18. Method of thinking
1. not developed 2. neutral 3. developed

19. Motivation for further study
1. absent 2. neutral 3. present

20. Enjoyment of study
1. little 2. neutral 3. much

Table 2. Output Forms of Comments and Prescription

EVALUATION OF THE LECTURE

NAME OF THIS LECTURE ... Chemistry
Number of students ... 42

CHARACTERISTICS OF THE LECTURE WHICH YOUR STUDENTS THINK AS IDEAL
Main points of the lecture were included.
The story is clear and fundamental items were included.
The contents are very understandable.
The motivation for learning is stimulated.

CHARACTERISTICS OF YOUR LECTURE EVALUATED BY YOUR STUDENTS
The ways of explanations were commonplace.
The impressions of your lecture were not felt powerful.
The contents were less understandable and ways of thinking were not learned.
The motivation for learning were not stimulated and the learning was unpleasant.

POINTS TO BE IMPROVED
Make your curriculum more constructive.
Make the structure of your lecture better and include main points.

Make the story of your lecture clear, include fundamental items and make your explanation more strict.
Ways of explanation should be improved.
Make the impressions of your lecture more powerful.
Make contents more understandable and should the ways of thinking should be learned.
Stimulate students motivation and make the learning pleasant.

Table 3. Percentage of Responses of Students to Six Different Programs

	No.	Understandable	Not understandable	Interesting	Not interesting
(1)Studio	1	57.0	8.4	40.6	16.1
(2)Classroom one camera	2	48.3	5.6	4.5	31.9
(3)Classroom 3 camera	3	44.7	14.4	10.8	18.2
(4)Lecture from the field	4	40.9	5.3	47.7	7.0
(5)Documentary (Professor)	5	51.9	2.5	45.7	3.5
(6)Documentary (Actor)	6	58.5	4.1	54.4	5.3

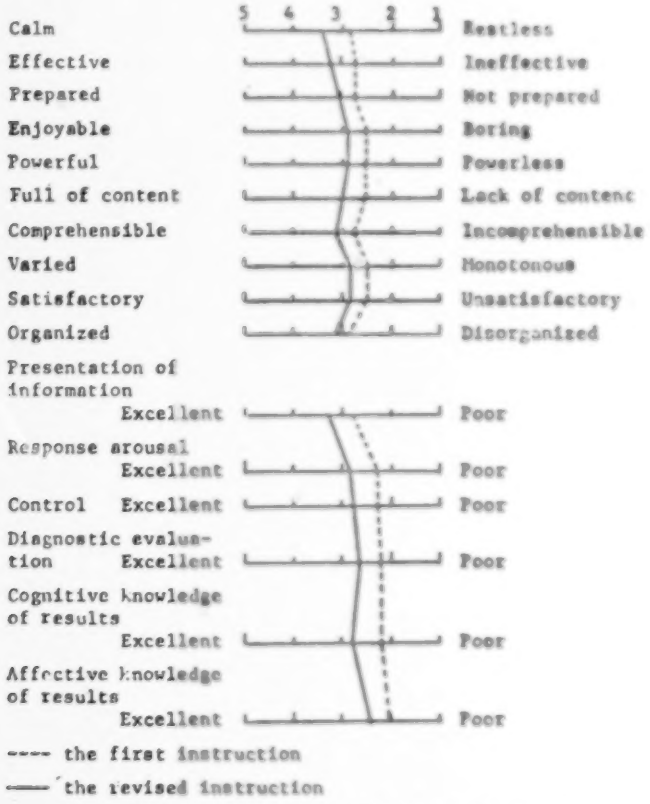


Fig. 1. Video Self-Confrontation.

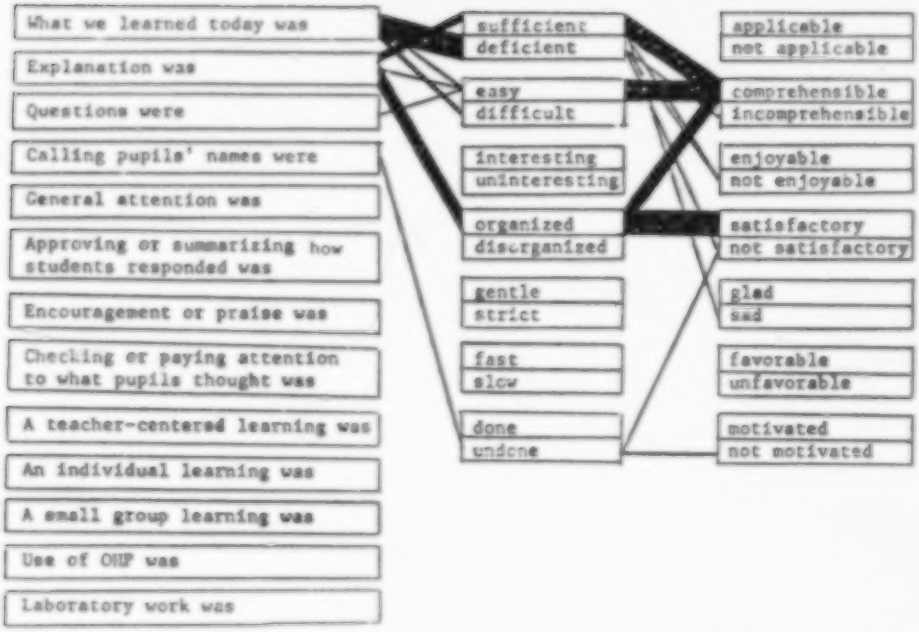


Fig. 2. Group 1 [the Video Self-Confrontation]. The number of subjects: 554.

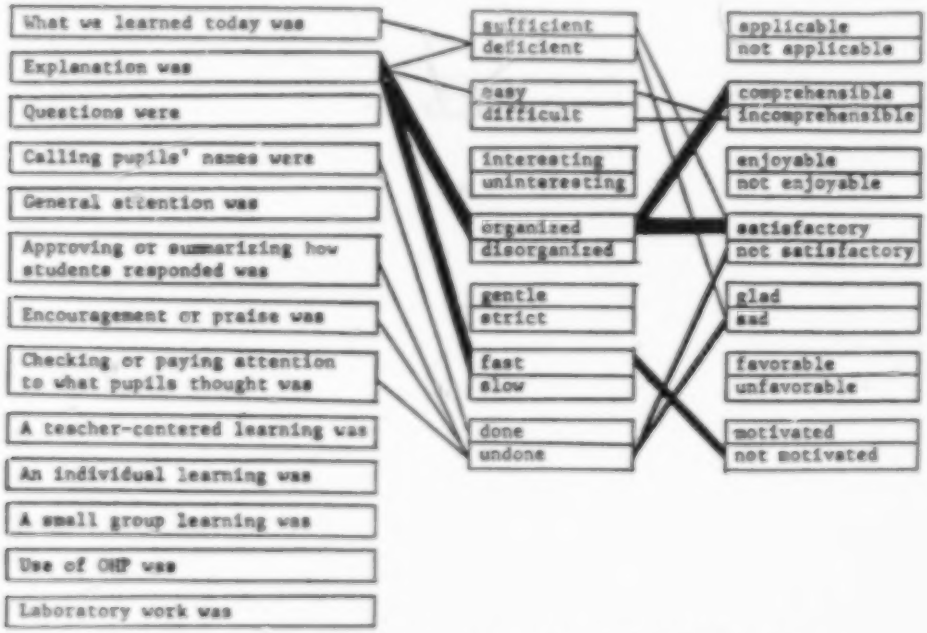
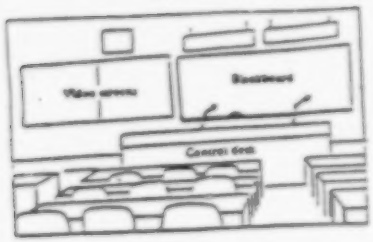
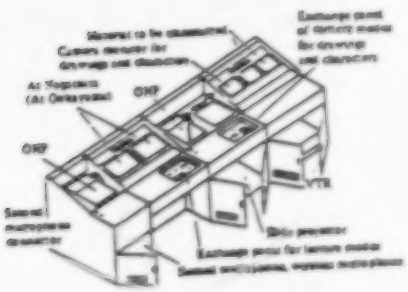


Fig. 3. Group 3 [No Feedback]. The number of subjects: 368.

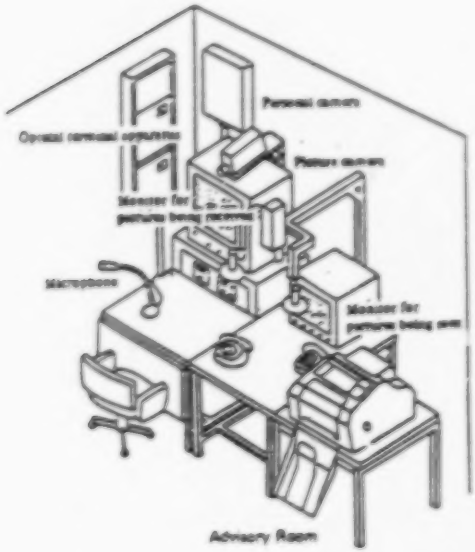
Figure 4. The optical fibre lecture transmission sytem in Tokyo Institute of Technology



Lecture room



Instructor's desk



Advisory Room

TOPIC VI
RESEARCH FUNCTIONS OF UNIVERSITY AND GRADUATE SCHOOL

Japanese Graduate Education and Its Problems
Research Role of the University and Graduate Education

JAPANESE GRADUATE EDUCATION AND ITS PROBLEMS

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I. An Introductory Remark

In 1986, the Japanese Provisional Commission for Educational Reform alarmed in it's second report that the Japanese graduate education falls far behind in comparison with other advanced countries. This report cites some data, according to which the number of graduate students per 1,000 inhabitants is 4.9 for the U.S.,2.8 for France, 0.9 for the Great Britain, but only 0.5 for Japan. The proportion of graduate students to undergraduate students is 14.5 percent for the U.S., 17.8 percent for the Great Britain, 20.2 percent for France, but only 4% for Japan.

We can add more indicators to show the undergrowth of Japanese graduate education. The annual production of doctoral degrees per 10,000 inhabitants is 1.5 for the U.S.,2.2 for West Germany, but only 0.5 for Japan. A comparison with Korea also tells us the same picture. Korea has 1.5 master's course students per 1,000 inhabitants, but Japan only 0.4, and Korea has 0.3 doctoral course students per 1,000 inhabitants, but Japan only 0.2. All those figures indicate that Japanese graduate education seems to be an anomaly in a country where everything tends to expand in its size. It might sound strange to stick too much to numbers, figures and proportions to discuss problems of graduate education. A wise man said " small is beautiful." However, we should also admit that small is not necessarily beautiful. To be small is sometimes an obvious indicator of the unpopularity and failure.

The aim of this paper is neither to complain about the undergrowth of Japanese graduate education, nor to boast of "small but beautiful" Japanese graduate education, but to analyze the background and function of graduate education in Japan and to describe various problems which graduate education in Japan faces.

II. The Structure of Graduate Education in Japan

In 1985, 48,147 graduate students enrolled in the master-courses of the graduate schools, and 21,541 in the doctor-courses. The Japanese graduate schools are composed of the 2 year Master's courses and the 3- year doctoral courses after the completion of the master's courses. The master's degrees are conferred after two years course-work and by submitting a master-dissertation. The doctoral

degrees are conferred after normally three year course work (five year including the course work for the master-courses) and likewise by submitting the doctoral thesis.

In Japan, there are 460 four-year universities(in 1985), but not all of them have graduate schools. 88 out of the 95 national universities have the graduate schools, among which 47 universities have doctoral courses and 41 have master's courses. As for the private universities, 171 out of 331 have graduate schools, and 46 universities have master's courses, 125 have doctoral courses. Six out of 34 municipal universities have master's courses, 16 have doctoral courses. It indicates that 20 percent of Japanese universities have master's courses, 41 percent have doctoral courses, and the remaining 39 percent have no graduate schools.

Looking the composition of graduate students by the study-fields rather striking trends can be seen. As is shown in Figure 1, 43 percent of the master's course students enroll in graduate schools of engineering, which comprise the largest sector of Japanese graduate education. The second largest sector is the humanities, to which enroll 11.7 percent of the total master's course students. The third largest is agricultue (10.2 percent), which is followed by natural sciences (9.5 percent), social sciences (9.1 percent), and education (8.0 percent).

The historical statistics (see Figure 2) tell us that the total enrollment of the master's course students has increased 2.9 times from 1965 to 1985, while the enrollment in graduate schools of engineering has increased 3.7 times.

III. The Labor Market for Graduates from the Master's Courses

To explain this disproportionate expansion of graduate education for the technology, we need to describe the labor market open to the graduates from the master's courses. As is shown in Figure 3, the labor market is quite different from field to field. 90 percent of the master's course graduates of engineering enter into the labor market, while only 28 percent to 38 percent of the master's course graduates of the humanities and social sciences enter into the labor market. In general, the majority of the graduates of the natural sciences in a broad sense enter into the labor market directly after the completion of the master's courses, and few advance to doctoral courses. In contrast, the majority of the master's course graduates of the humanities and social sciences advance to the doctoral courses.

During the past 20 or 30 years, graduate schools of engineering succeeded in establishing the tight connection with industry, and to supply the master's course graduates to industry as highly qualified young engineers. It is also the case for graduate schools of agriculture, which now supply industry many highly-qualified specialists.

Against that, the labor market for master's course graduates in the humanities and social sciences is still limited to teaching, mostly high school teachers, and in part the junior staffs of universities and junior colleges. The remaining majority advances farther to doctoral courses. It means that the master's courses of engineering and to some extent, agriculture are playing the role to supply higherly qualified engineers to industry, while master's courses in other fields function as the preliminary courses to doctoral courses with virtually no linkage to industry. Notably, master's courses in the humanities and social sciences have almost no market in industry nor in the civil service.

IV. The Admission to the Master's Courses

The Condition of the labor market is reflected in the competition for admission to master's courses. The competition ratio differs from school to school. The master's courses of engineering are able to attract a lot of qualified candidates, while other fields can not have enough candidates. As is shown in Figure 4, the master's courses of engineering have 1.6 times more candidates than the admission quota assigned to them, and admit more graduate students than their admission quotas.

In contrast, the admitted students to the master's courses of social sciences do not reach to the prescribed admission quota. Namely, roughly two thirds of the admission quota of the master's courses for the social sciences remain unoccupied. Although they have more candidates than the admission quota, only one third of candidates are admitted. It is because the quality of candidates is not high enough to be admitted. The same can also be said in the case of the humanities.

In summary, the competition ratio for the master's courses is uneven. The graduate schools of engineering are successful to attract more qualified candidates, while other graduate schools are still not succeeding in doing so. Consequently, around 40 percent of the admission quota for the humanities remain vacant and roughly 60 percent of the admission quota for the social sciences remain vacant.

V. The Labor Market Open to Graduates from Doctoral Courses

The situation of the doctoral courses is more problematic. For almost all fields of study, the number of candidates does not reach the admission quota, as is given in Figure 5. Even for the graduate schools of engineering, candidates for the doctoral courses are not enough in number to fill up the admission quota. For all fields of study included, the admitted students for the doctoral courses are only 55 percent of the admission quota, the remaining 45 percent of the prescribed admission quota remain unoccupied.

Graduate education for medicine is different from other fields. The school for the medicine is prescribed 6 years after entering the undergraduate courses. All graduates from medical schools are awarded master's degrees. Some of them, if they intend to earn doctoral degrees, advance farther to the doctoral course. Resultingly, the largest sector of the doctoral courses, as is given in Figure 6, is medicine.

The unpopularity of doctoral courses is related to the labor market situation. The labor market for them is more narrow than that open to the master's course graduates. Practically the only job possibility is a teaching position at the college and university level. Neither enterprises nor central and local government are positive about recruiting graduates from doctoral courses. They consider that graduates from the doctoral courses are too specialized to be hired in enterprises or government. Consequently, graduates from the doctoral courses have to seek any available teaching post at higher educational institutions.

VI. Mismatch of Demand and Supply to the Academic Teaching Profession

The demand from the academic teaching market has not increased enough to absorb the ongrowing graduates from doctoral courses. Although Japanese higher education has constantly expanded, the expansion has not led to broader job opportunities for graduates from the doctoral courses. As is shown in Figure 7, the total number of teaching staffs at four-year universities and junior colleges(all categories from professor to research associate included) has almost doubled during last 20 years. However, the number of doctoral course graduates who succeeded in finding a job in higher educational institutions has been limited to roughly 1,200 each year. As a result, the percentage of those who succeeded to get junior faculties positions at any universities or junior colleges after the completion of the doctorate has decreased (see Figure 8). In 1965 35 percent of the total doctoral course graduates were absorbed into the teaching profession of higher educational institutions, while the percentage for 1985 has dropped to 25 percent.

Now, 27 percent of graduates are reported to be unemployed a month after the completion of the doctoral courses. Of course, a considerable amount of them succeed to find a job later, and not all of them continue to be unemployed for a long time. However, some of them are forced to remain jobless or without a stable income. Those graduates from the doctoral courses who are unable to find a job are called "overdoctors". A governmental report says that the number of the so-called "overdoctors" amounts to around 1,700, and it has been growing for a few years. According to this report, the number of them are conspicuous in the fields of natural sciences and humanities (see Figure 9). Different from engineering, the training at graduate schools of natural sciences mostly focus on basic science, which has less relevance to industry. The labor market for natural science graduates is more narrow than their counterpart in engineering.

Because of the increase of "overdoctors" and the sharpening competition for academic positions, the job possibilities for young scientists have been getting worse. Now, they have to wait a considerably long time to find academic teaching positions. In 1974, among newly recruited teaching staff (all categories from professor to research associate included), 58 percent were younger than 30 years old. However, the percentage for 1983 has dropped to 44 percent. The average age of those newly recruited to teaching staffs has risen from 30.5 percent years old for 1974 to 32.4 years old for 1983. The average age of research associates has risen from 31.9 for 1974 to 34.4 for 1983, and for lecturers it has risen from 38.4 for 1974 to 39.4 for 1983, for the associate professors from 42.0 for 1974 to 43.3 for 1983. All of these indicators tell us that Japanese higher education faces the difficulty of taking on young bright staff members, and the age composition of the teaching staffs, as is seen in Figure 10, has shifted toward older brackets.

VII. The Degree System and Its Problem

The doctoral degrees are conferred to those who have studied normally three years beyond the master's degree and submit an original thesis. However, the accessibility to the doctoral degree is quite different from field to field. In general, in the humanities and social sciences, it is hard to obtain the doctorate immediately or within a few years after completing the doctoral courses. In a sharp contrast in the natural sciences in a broad sense, most graduates succeed earn the doctoral degree at the time of the completion of the three ear Doctor's course, or within a few years after that. In 1984, 4,090 students finished the Ph.D courses, among them 2,725 (66.6 percent) succeeded to earn the Doctoral degrees. However, 66.6 percent is the average for all of the study-fields. There is a large difference across study-fields for the percentages who completed the doctoral courses with a degree. As for the natural sciences, technology, agriculture and medicine, more than 77 percent succeeded to earn doctoral degrees. In contrast, the percentage for the humanities is only 2, and for social sciences only 6 (see Figure 11). Namely, doctoral degrees in the natural sciences, engineering, agriculture and medicine are relatively easy to acquire, against those for the humanities and social sciences.

The difference comes partly from the different perception of professors about the doctoral degrees and partly from the innate character of the sciences. In general, professors of humanities and social sciences tend to demand high quality and originality for their students' dissertation. They purport that many years are neccessary to complete original research. But for young scholars of humanities and social sciences, it is not easy, because of the innate character these fields, to show the originality exceeding the present level of research. From those reasons, the large difference in awarded doctoral degrees between the natural sciences, humanities and social sciences occurs.

Recently, this problem is causing a wide-range of dissatisfaction particularly among foreign students. Now, at Japanese universities the number of foreign students is growing remarkably. According to the report of 1984, 13,337 foreign students register to four-year universities(0.8 percent of total undergraduate students) and 4,586 to graduate schools (7 percent of total graduate students). Those foreign students have a strong expectation to acquire doctoral degrees. They are carefully comparing Japanese graduate education with the U.S. or Europe in regard to accessibility of doctoral degree. In response to such a situation, discussion is now arising how to define the level of the doctoral degrees especially in the humanities and social sciences. Some are afraid that if we hold to the traditional concept of the doctor's degrees, we'll lose foreign students to the U.S. or other countries where the doctoral degrees are considered to be easier to get. We are now under the impact of such an international setting.

To earn a doctorate in the humanities and social sciences, students have to continue their own research after finishing three years of course-work. As the first step, they try to find any teaching job in the universities or junior colleges, and they work on the dissertation while teaching.

According to the regulations, the qualification to submit the doctoral dssertation is expired, if they don't submit the paper within three years after the completion of the doctoral courses. However, another way to the doctoral degree is still open. This alternative is called " ronbun doctor" (doctor by submitting thesis,論文博士), classified from the "katei doctor" (the doctor of completion of the course-work and the thesis submitted, 課程博士). In fact, most part of the doctors of the humanities and social sciences are conferred as "ronbun doctor." According to a 1984 report, 78 percent of the doctoral degree earners in the humanities and social sciences are "ronbun doctors" (see Figure 12). Although there is no official report indicating the age of those doctoral degree earners, it is guessed publicly that there is a wide age range, some succeeded to earn by their middle thirties, others being older than their sixties before they earn them. In the contrast, the proportion of the katei-doctors in the natural and engineering sciences is significantly high. 56 percent of the doctors of natural science, 40percent of the doctors of engineering, 33 percent of the doctors of medicine, 32 percent of the doctors of agriculture are acquired as the katei-doctors. As easily imagined from the description until now, the share of the conferred doctor-degrees by the fields of study is uneven. In 1984, 7,477 doctoral degrees in total (including both ronbun- and katei-doctors) were conferred, among them the largest group is medicine which makes up 48 percent of the total doctoral degrees conferred; the second largest is engineering (17 percent), the third largest is the natural sciences (11 percent). The humanities and social sciences make up only 3 percent of the total doctor's degrees conferred in 1984 (see Figure 13).

VIII. The Minimum Qualification Required for Teaching Staffs

The governmental standard stipulates the doctorate as the minimum qualification for full- and associate professors. However, at least in the humanities and social sciences, this stipulation is practically neglected. As already mentioned, students in the humanities and social sciences finish doctoral courses without earning degrees. The only thing they do expect while enrolling doctoral courses is to wait for the chance of a job as research associates or lecturers. Most of them give up completing their dissertation within the prescribed term of years. Therefore, it could be said that the three year doctoral courses of the humanities and social sciences are becoming a kind of "waiting hall" for entering the academic teaching profession. Such a recruitment system has been already normalized for a long time. This in turn disuades graduate students from devoting themselves to complete the dissertation within the prescribed period, which results in the low productivity of the doctorates in the humanities and social sciences.

IX. The Recent Innovations of Graduate Education

At the end of my paper, I would like to add a few words on recent innovations in graduate education. The first is concerning the introduction of the special support system the graduate students. The second is the connection of graduate education with further professional training.

In 1985, the government introduced the new special support system for graduate students in doctoral courses. This project aims to attract more able students to the doctoral courses, and to offer them a more stable financial basis. According to the survey conducted in 1984, the annual expenditure of graduate students of the master's courses amounts to 1,294,400 yen on the average. 57 percent of this expenditure is covered by contributions from parents. The share of income from scholarships is only 26 percent. 21 percent of total income is from the part-time jobs of students. As for students of doctoral courses, the percentage of the parental contribution decreases to 29 percent, while the share of the income from the part-time jobs increases to 42 percent (see Figure 14). It tells us that most graduate students depend financially on their parents or the income from their part-time jobs.

Now, the starting salary of the four year university amounts to roughly 2,700,000 yen per year. Male workers graduated from the university of the same age bracket as doctoral course students earn on average more than 4,000,000 yen per year. The comparison with peers who followed a different career route shows considerable disadvantage for graduate students. The poverty of graduate students and young scholars is not unique to Japan. It is an international phenomenon. However, the prolonged financial dependency on parents, and an unstable future is one of the main reasons which make graduate education unattractive to youth.

To overcome this situation, the government started the new support system for the students of the doctoral courses. Selected

students who have completed doctoral courses are awarded grants of 2,568,000 yen annually, and those who still enroll in doctoral courses are awarded 1,476,000 yen per year. Of course, it is still not enough to be on a par with peers employed in other enterprises, but it is enough to offer a more stable financial basis to graduate students and young scholars.

Regrettably, until now the capacity of the allowance is still limited. For the 1985 academic year, 244 in total were awarded this special grant. For this academic year, around 320 are planned.

The second reform of graduate education is the establishment of master's courses of a new type, which aims to combine the graduate education and on-the-job training. Under the system until now, it has been virtually impossible to combine graduate education with working in enterprises. If people go to graduate school, they have to resign from the enterprise.

To make the relation with working and learning more flexible, a new type of master's courses was introduced. Under this plan students can have a graduate education while working under the permission of employers. The first year, they have to enroll graduate school on full-time basis, however, the second year they go back to the job, and take the course work on a part-time basis and prepare for the it dissertation parallel with working. After graduate education, students can go back to the in former work. The system aims to make the barrier between work and learning more flexible, and to build up closer linkage between graduate education and on-the-job training.

This system, though still small in size is now being tried for the further training of school teachers and public administrators. It is expected to expand to other professions in the future.

FIGURE 1 : GRADUATE STUDENTS OF MASTER'S COURSES BY FIELDS (1985)

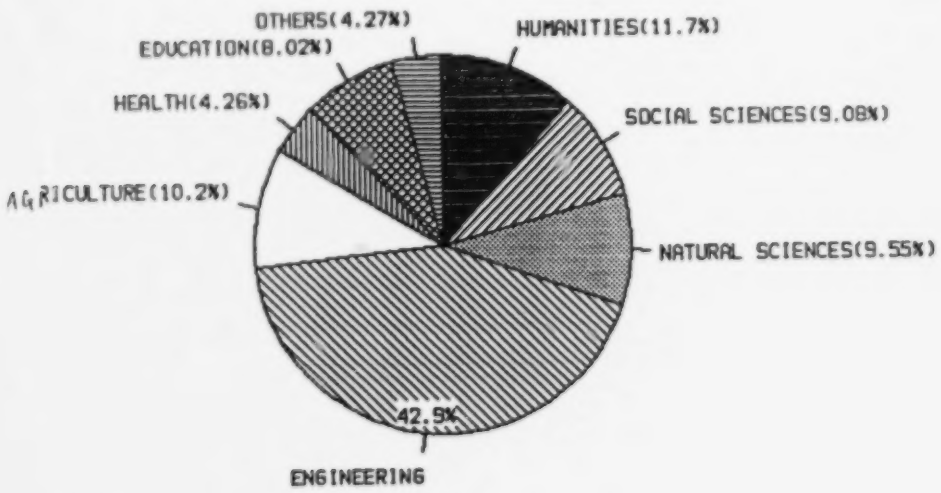
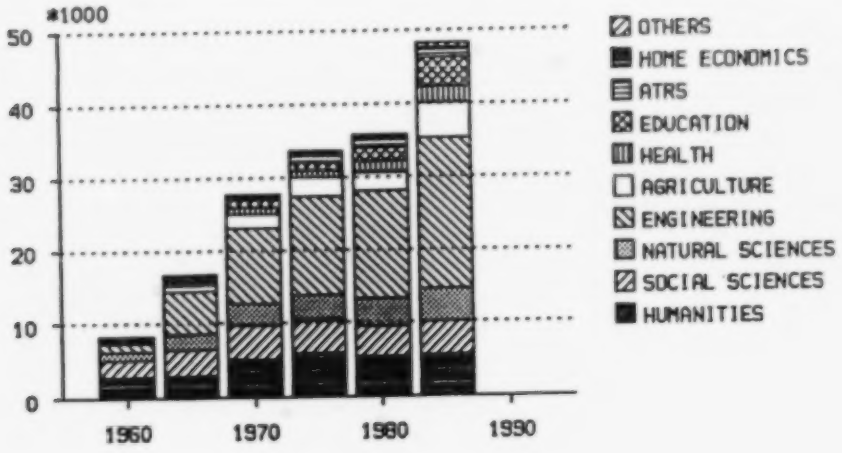


FIGURE 2 : GROWTH OF MASTER'S STUDENTS BY FIELDS



< Graduate School Master's Courses >

	Total	Human.	Social science	Science	Engin.
1960	8,305	2 870	2,370	987	1,223
65	16,771	3,104	3,355	2,198	5,657
70	27,714	5,157	4,607	2,983	10,251
75	33,560	5,975	4,596	3,226	13,514
80	35,781	5,469	4,050	3,741	14,864
81	37,213	5,513	3,865	3,853	15,581
82	39,881	5,542	3,959	4,040	16,600
83	42,525	5,651	4,105	4,223	17,521
84	45,105	5,605	4,228	4,361	18,868
Male	38,912	3,752	3,483	3,990	18,565
Female	6,193	1,853	745	371	303
National	28,419	1,594	1,152	3,281	14,153
Local	1,675	213	145	193	536
Private	15,011	3,798	2,931	887	4,179

Agric.	Health	Home econ.	Educ.	Mer-cantile marine	Arts	Others
372	140	11	291	–	41	–
1,020	512	116	461	–	348	–
2,063	909	212	946	–	586	–
2,691	1,018	278	1,228	49	985	–
2,546	1,497	280	1,863	44	1,142	285
2,662	1,596	291	2,248	35	1,262	307
3,558	1,706	277	2,577	29	1,282	311
4,516	1,807	260	2,874	47	1,223	298
4,801	1,943	295	3,359	59	1,256	330
4,129	1,592	12	2,364	59	681	285
672	351	283	995	–	575	45
3,073	1,070	117	2,997	59	593	330
197	144	27	12	–	208	–
1,531	729	151	350	–	455	–

FIGURE 3 : FIRST DESTINATIONS OF GRADUATES FROM MASTER'S COURSES BY FIELDS(1985)

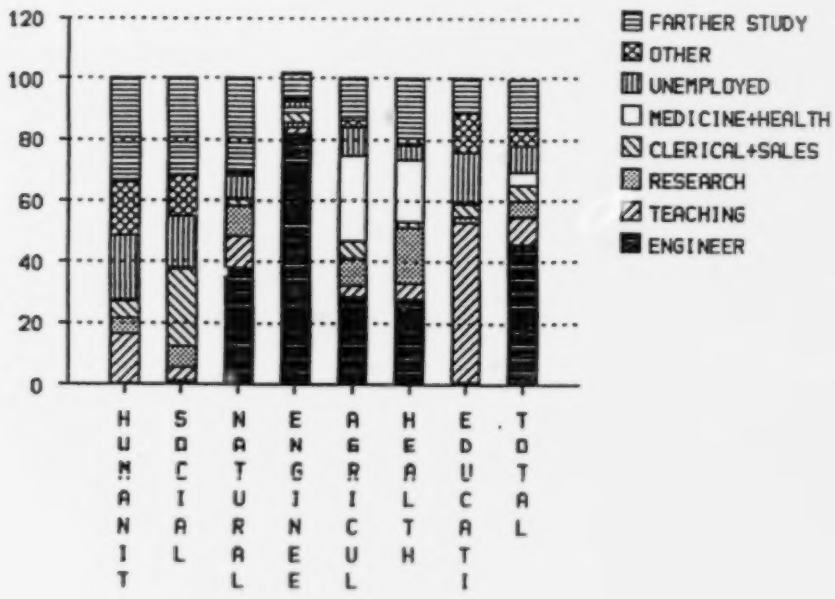
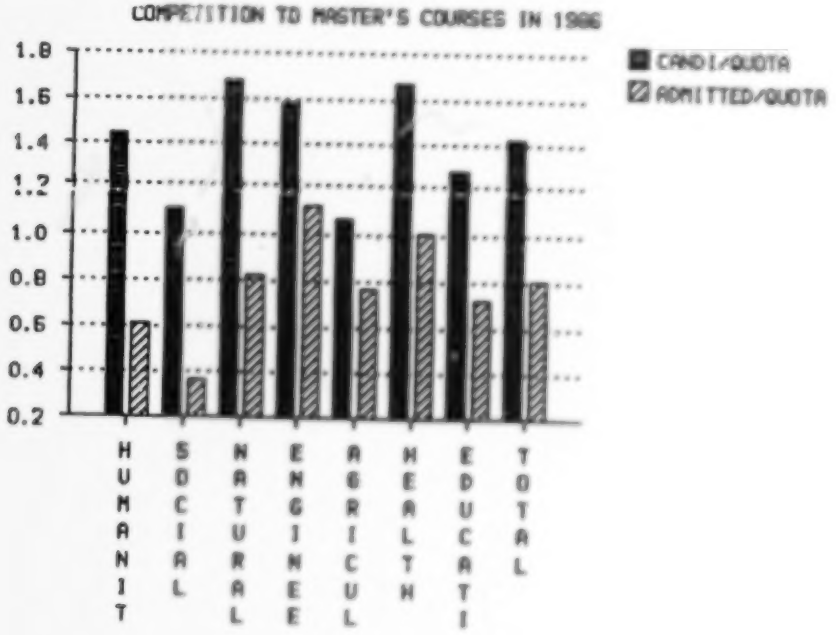


TABLE XX : DESTINATIONS OF GRADUATES FROM MASTER'S COURSES IN 1985 (%)
(SELECTED FIELDS OF STUDY ONLY)

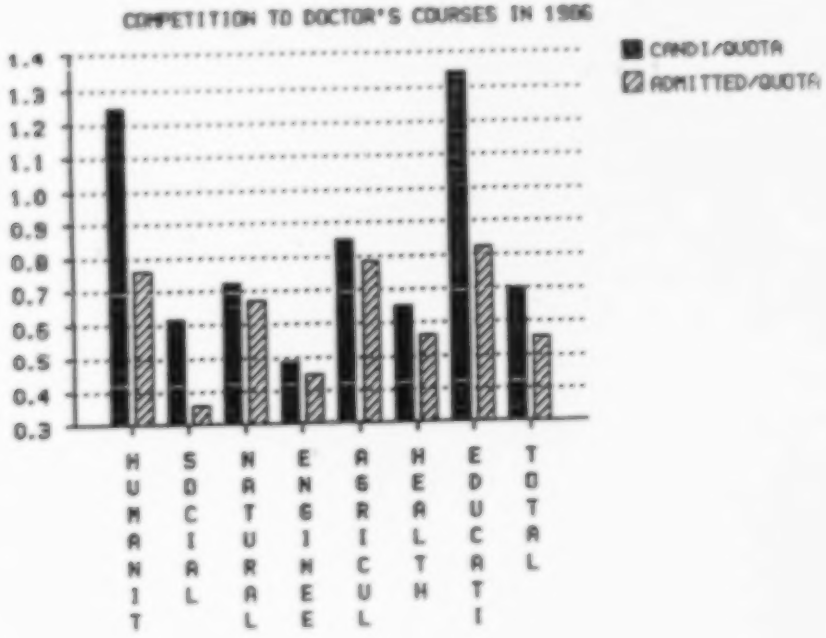
FIELDS	ENGINEERING	TEACHING	(TEACHING OF HIGHER EDUC)	RESEARCH	CLERICAL	MEDICINE HEALTH	UNEMPLOYED	OTHER	ADVANCE TO STUDY	TOTAL	NUMBER
HUMANITIES	0.4	16.0	2.7	5.3	5.7	0.1	21.4	17.1	34.0	100.0	1,885
SOCIAL SCIENCES	1.3	4.4	1.3	6.9	24.9	0.3	16.9	13.7	31.8	100.0	1,677
NATURAL SCIENCES	38.1	10.4	1.2	9.6	2.5	0.1	7.5	1.1	30.7	100.0	1,992
ENGINEERING	82.1	2.2	0.8	1.7	2.9	1.9	2.0	0.8	8.3	100.0	8,628
AGRICULTURE	28.3	4.0	1.6	8.8	5.7	27.7	9.7	2.0	13.8	100.0	2,180
HEALTH	27.9	5.2	4.9	18.3	1.8	20.0	5.0	0.1	21.9	100.0	901
EDUCATION	0.8	51.7	3.4	2.2	3.9	1.0	16.3	13.0	11.1	100.0	1,247
TOTAL	45.7	8.9	1.8	5.3	5.3	4.2	8.9	5.1	16.5	100.0	19,315

FIGURE 4 : APPLICANTS TO MASTER'S COURSES BY FIELDS (1986)



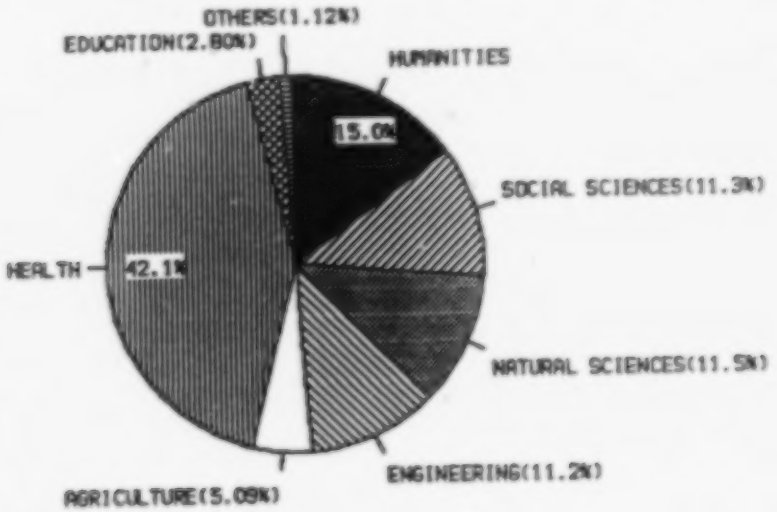
FIELDS	(1) CANDIDATES	(2) ADMISSION QUOTA	(3) ADMITTED	(4) RATIO (3)/(2)
HUMANITIES	5,519	3,829	2,327	0.61
SOCIAL SCIENCES	6,392	5,762	2,094	0.36
NATURAL SCIENCES	5,213	3,102	2,557	0.83
ENGINEERING	16,063	10,149	11,444	1.13
AGRICULTURE	3,647	3,420	2,610	0.76
HEALTH	1,837	1,100	1,107	1.01
HOME ECONOMICS	257	294	172	0.59
EDUCATION	3,499	2,733	1,965	0.72
ARTS	1,565	543	650	1.20
OTHERS	453	239	238	1.00
TOTAL	44,445	31,171	25,164	0.81

FIGURE 5 : APPLICANTS TO DOCTOR'S COURSES BY FIELDS (1986)



FIELDS	(1) CANDIDATES	(2) ADMISSION QUOTA	(3) ADMITTED	(4) RATIO (3)/(2)
HUMANITIES	1,358	1,090	829	0.76
SOCIAL SCIENCES	950	1,545	552	0.36
NATURAL SCIENCES	752	1,044	701	0.67
ENGINEERING	1,192	2,470	1,089	0.44
AGRICULTURE	452	532	417	0.78
HEALTH	3,283	5,040	2,820	0.56
HOME ECONOMICS	24	30	12	0.40
EDUCATION	242	180	148	0.82
ARTS	53	50	19	0.38
OTHERS	75	54	58	1.07
TOTAL	8,381	12,035	6,645	0.55

FIGURE 6 : GRADUATE STUDENTS OF DOCTOR'S COURSES BY FIELDS (1985)



< Graduate School Doctor's Courses >

	Total	Human.	Social science	Science	Engin.
1960	7,429	1,016	894	900	391
65	11,683	1,281	1,086	1,345	1,282
70	13,243	1,876	1,727	2,263	2,356
75	14,904	2,465	2,198	2,355	2,522
80	18,211	2,860	2,430	2,589	2,358
81	18,390	2,926	2,384	2,471	2,218
82	18,761	2,937	2,376	2,403	2,151
83	19,475	3,086	2,383	2,366	2,165
84	20,587	3,157	2,453	2,483	2,223
Male	18,193	2,293	2,181	2,319	2,157
Female	2,394	864	272	166	66
National	12,149	1,322	959	2,051	1,749
Local	1,184	149	140	163	56
Private	7,254	1,686	1,354	271	418

Agric.	Health		Home econ.	Educ.	Arts	Others
	Med. & dent.	Others				
339	3,598	111	–	171	9	–
424	5,932	169	–	247	17	–
839	3,445	334	–	392	21	–
1,008	3,428	367	27	507	27	–
1,095	5,738	453	33	548	71	36
1,050	6,181	449	38	540	80	53
1,030	6,629	475	51	554	80	75
1,013	7,214	476	48	571	65	86
1,033	7,953	489	54	580	64	96
932	7,349	429	10	407	44	72
101	604	60	44	173	20	24
916	4,156	357	20	462	61	96
45	541	41	29	20	–	–
72	3,256	91	5	98	3	–

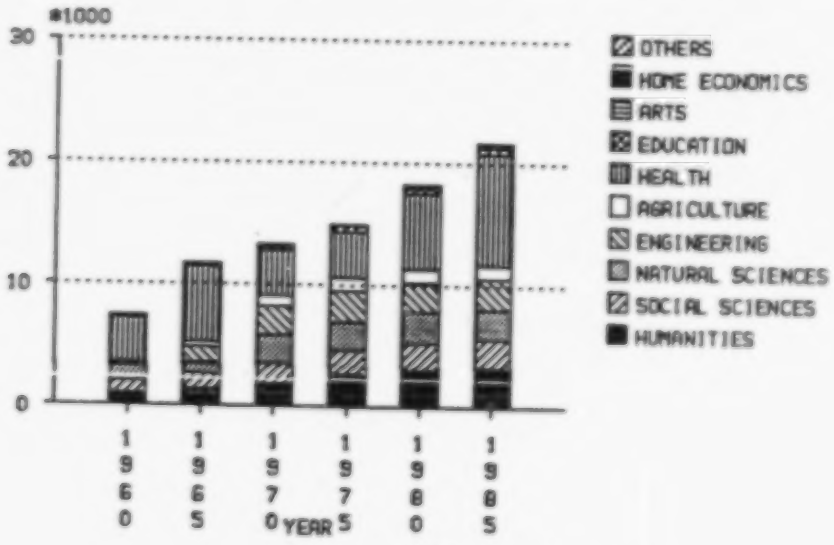


FIGURE 7 : GRWOTH OF TEACHING STAFFS OF UNIVERSITY AND JUNIOR COLLEGE

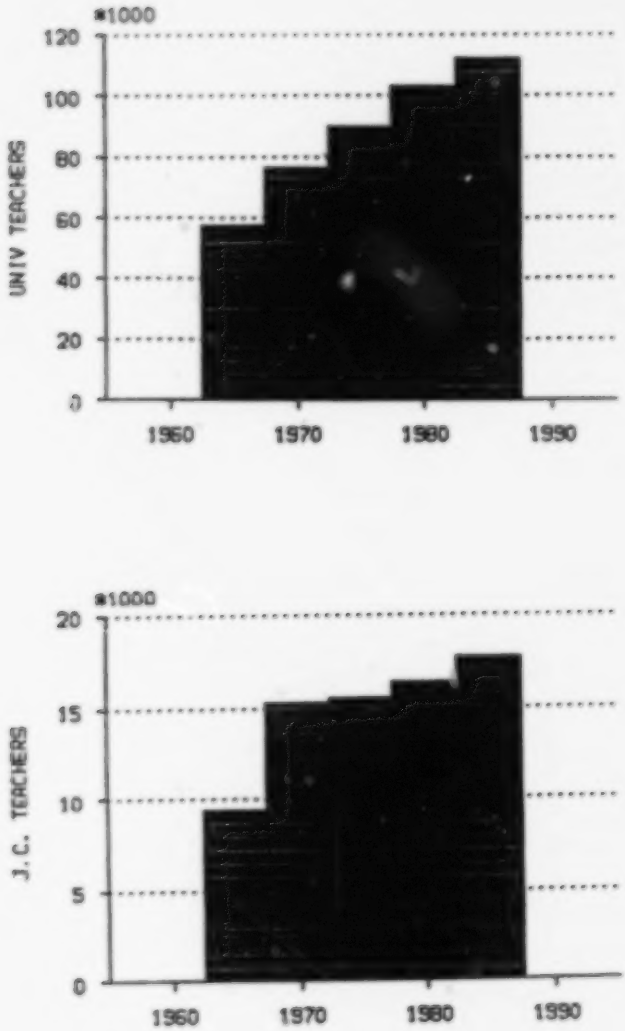


FIGURE 8 : FIRST DESTINATIONS OF GRADUATES FROM DOCTOR'S COURSES BY FIELD(1985)

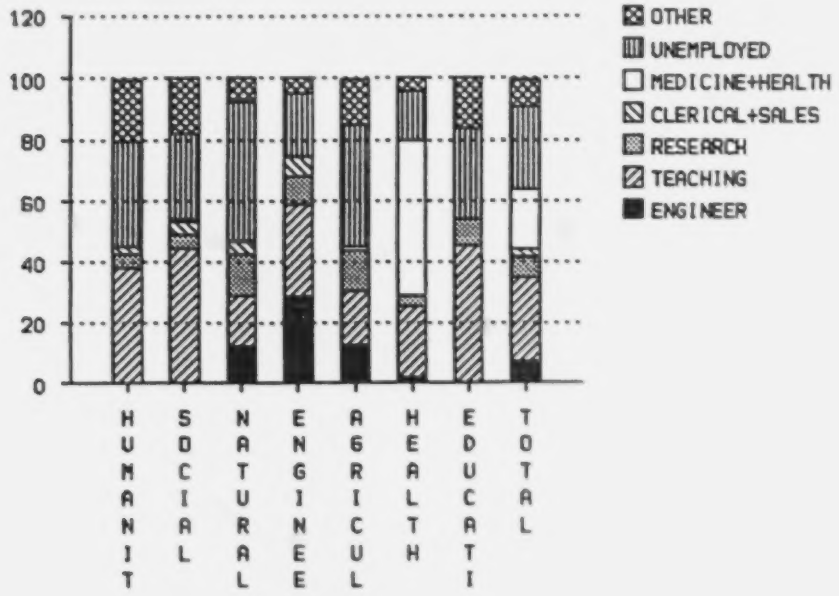


TABLE XX : DESTINATIONS OF GRADUATES FROM DOCTOR'S COURSES IN 1985 (%)
(SELECTED FIELDS OF STUDY ONLY)

FIELDS	ENGINEERING	TEACHING	(TEACHING OF HIGHER EDUC)	RESEARCH	CLERICAL	MEDICINE HEALTH	UNEMPLOYED	OTHER	TOTAL	NUMBER
HUMANITIES	0.2	37.9	29.0	4.6	2.2	0.0	34.6	20.4	100.0	583
SOCIAL SCIENCES	0.0	44.6	41.2	4.4	4.2	0.6	28.3	17.9	100.0	502
NATURAL SCIENCES	12.1	16.9	13.3	13.9	3.9	0.2	45.6	7.4	100.0	610
ENGINEERING	28.3	30.3	26.8	9.8	6.2	0.0	20.7	4.9	100.0	552
AGRICULTURE	12.4	17.9	15.9	13.5	0.0	1.2	40.2	14.7	100.0	251
HEALTH	1.6	23.8	23.6	3.1	0.5	51.0	15.9	4.1	100.0	1,713
EDUCATION	0.0	45.2	38.5	8.7	0.0	0.0	29.8	16.3	100.0	184
TOTAL	6.8	28.2	25.3	6.7	2.3	20.0	26.5	9.4	100.0	4,358

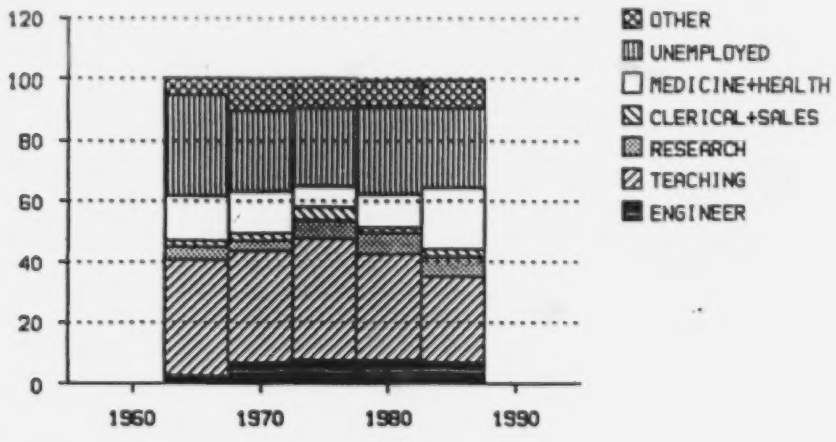


FIGURE 9 : NUMBERS OF " OVERDOCTORS" BY FIELD

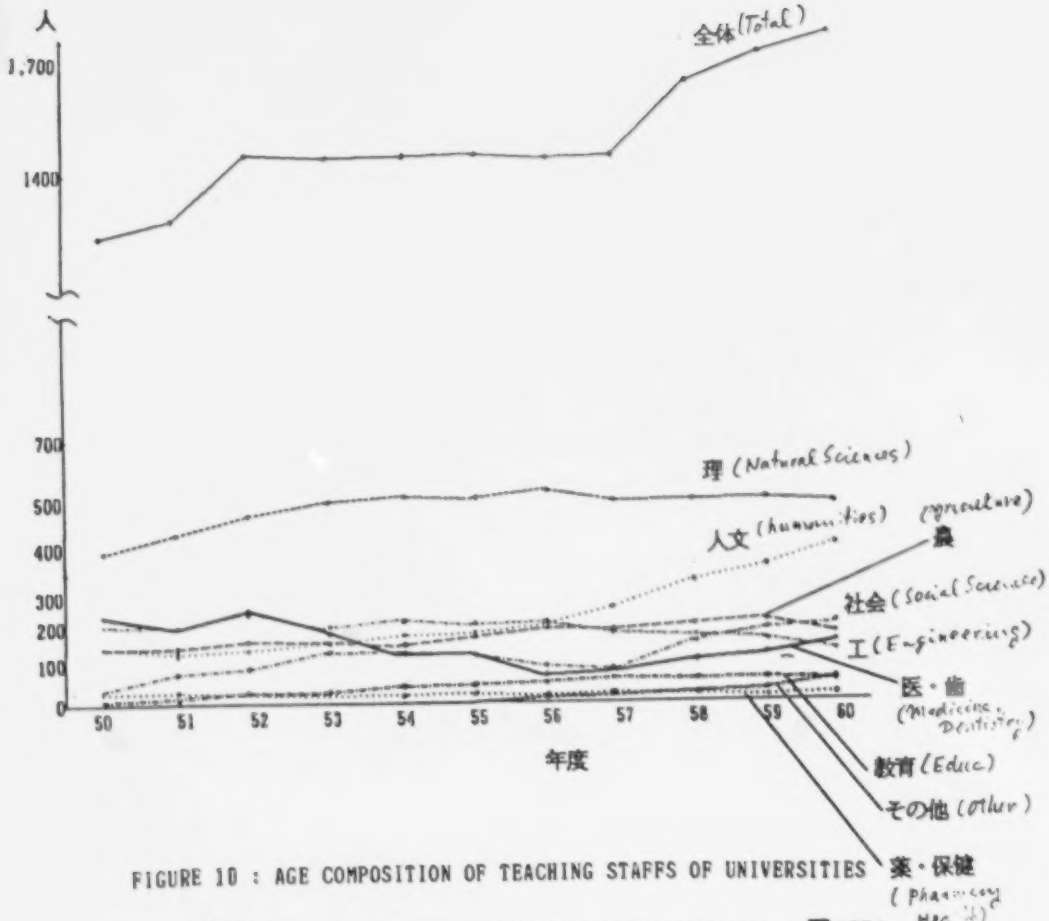


FIGURE 10 : AGE COMPOSITION OF TEACHING STAFFS OF UNIVERSITIES

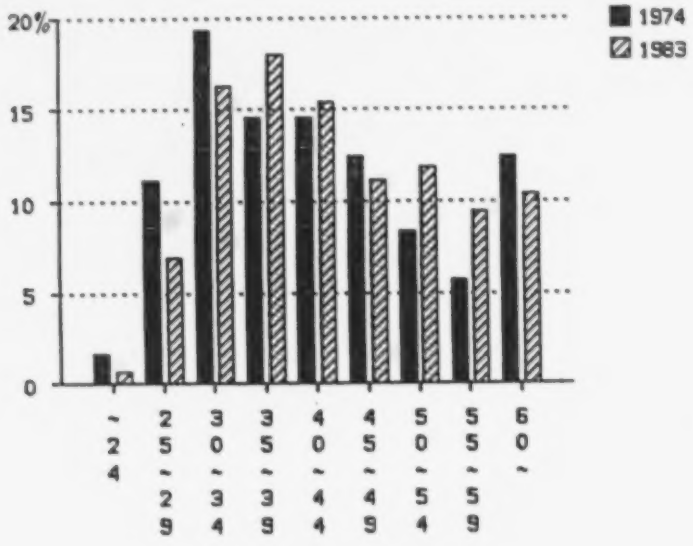


FIGURE 11 : PERCENTAGE OF DOCTOR'S DEGREE EARNERS AMONG THOSE WHO COMPLETED DOCTOR'S COURSE WORK BY FIELD (1984)

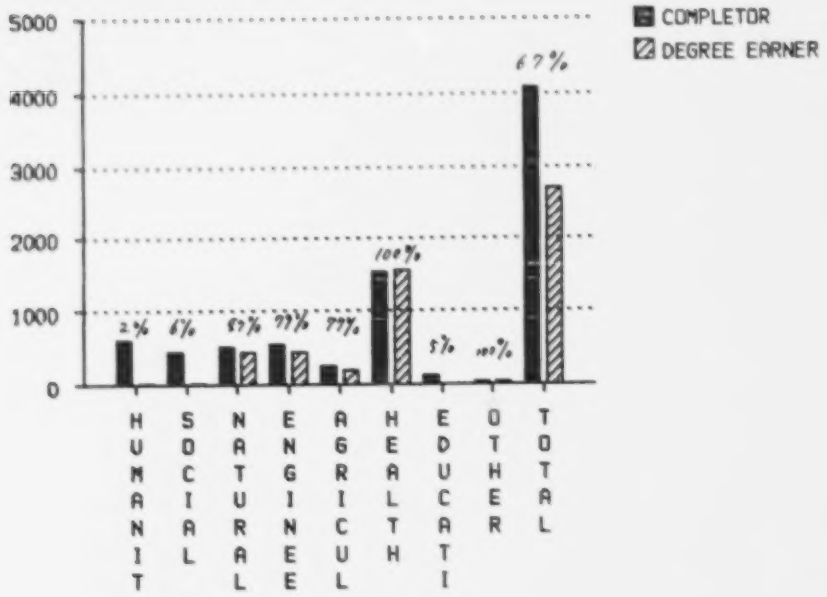


FIGURE 12 : COMPOSITION OF "RONBUN DOCTOR" AND "KATEI DOCTOR" BY FIELD(1984)

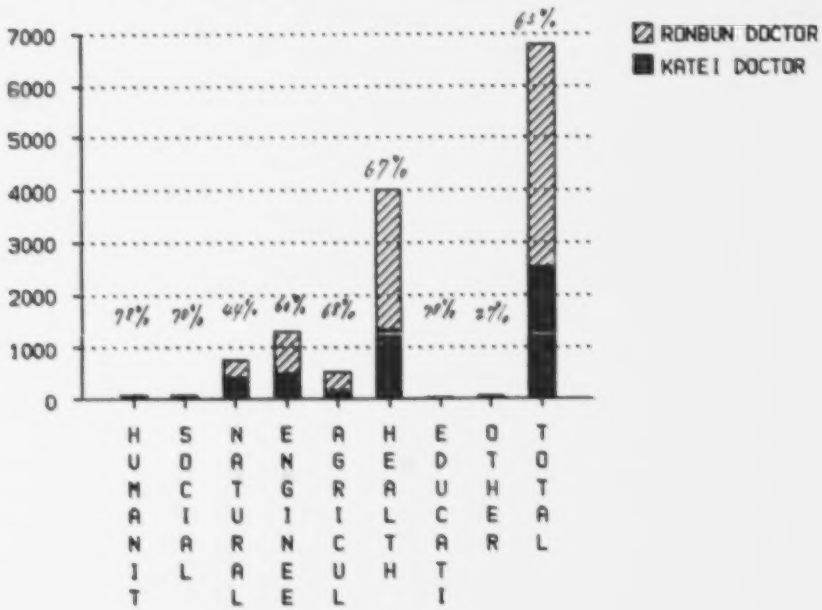
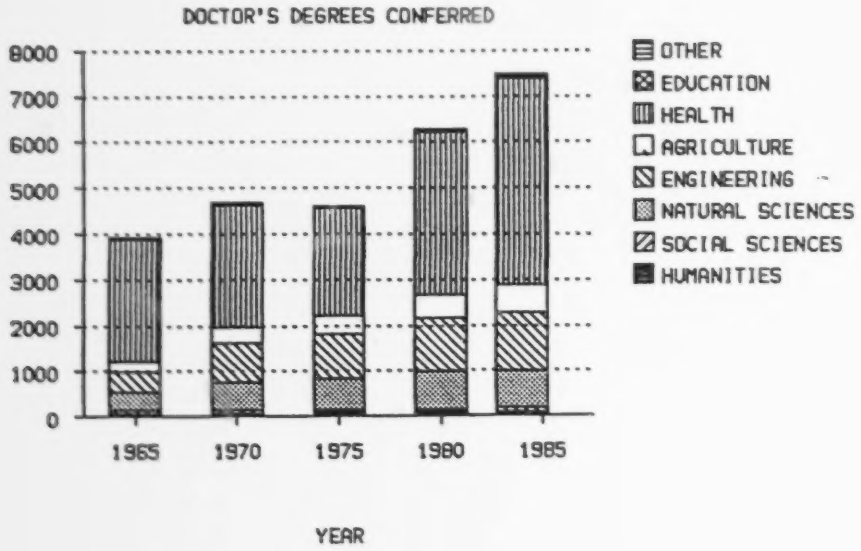


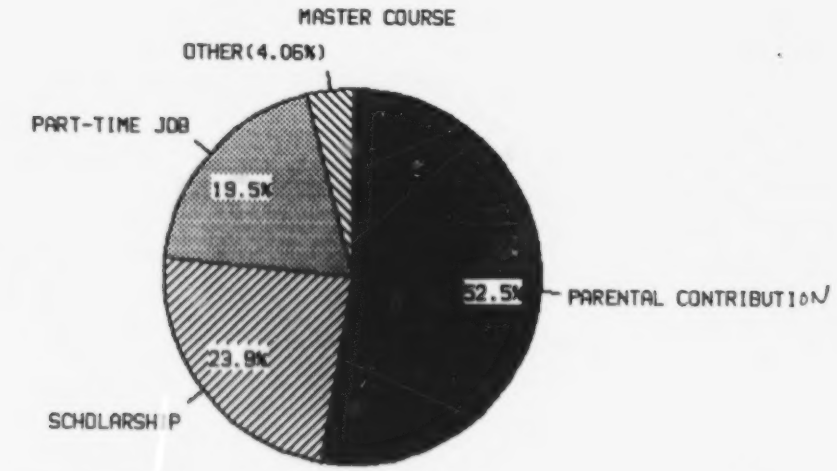
FIGURE 13 : DOCTOR'S DEGREES CONFERRED BY FIELD

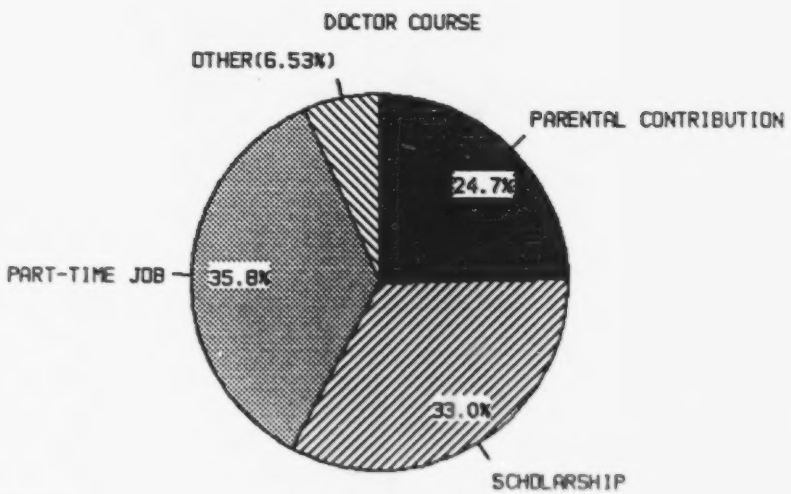


Graduate Degrees Awarded by Field of Study

	Total	Humanities	Social science	Science	Engineering	Agriculture	Health		Home economics	Education	Mercantile marine	Fine arts	Interdisciplinary Studies
							Med. & dent.	Others					
Master's degree													
1965	5,967	966	874	932	2,272	406	–	204	44	134	–	135	–
70	11,301	1,699	1,483	1,484	4,448	1,149	–	423	82	337	–	196	–
75	13,422	1,988	1,586	1,482	5,821	1,135	–	491	94	415	26	384	–
80	15,396	1,976	1,552	1,710	6,975	1,168	39	658	106	569	20	443	180
81	16,201	2,026	1,403	1,896	7,368	1,146	39	692	100	820	19	516	174
82	16,984	2,032	1,431	1,916	7,721	1,289	39	747	108	974	15	521	191
83	18,702	2,099	1,518	2,006	8,290	2,052	42	792	88	1,059	13	556	187
National	11,958	664	365	1,539	6,227	1,285	42	422	39	970	13	253	139
Local	723	71	44	77	241	80	–	79	2	–	–	102	27
Private	6,021	1,364	1,109	390	1,822	687	–	291	47	89	–	201	21
Doctor's degree													
1965	3,911	50	82	416	419	241	2,583	93	–	27	–	–	–
70	4,688	57	91	611	853	353	2,386	276	–	61	–	–	–
75	4,592	75	84	676	986	385	2,161	210	–	15	–	–	–
80	6,269	77	76	822	1,186	527	3,288	249	–	34	–	–	10
81	6,599	79	76	791	1,236	529	3,574	279	–	17	–	–	18
82	6,810	81	93	762	1,278	521	3,693	318	–	23	–	–	41
83	7,233	64	97	774	1,290	515	4,108	286	–	47	–	–	52
National	4,656	26	51	655	1,051	423	2,166	205	–	43	–	–	36
Local	539	5	6	40	39	27	377	36	–	–	–	–	9
Private	2,038	33	40	79	200	65	1,565	45	–	4	–	–	7

FIGURE 14 : INCOME RESOURCES OF GRADUATE STUDENTS (1984)





RESEARCH ROLE OF THE UNIVERSITY AND GRADUATE EDUCATION

Wan-kyoo Cho
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I. Introduction

It has generally been regarded that the university is the highest and final educational institution which has three major roles such as giving higher education, conducting research and offering social services. To fulfill its roles perfectly, every university provides adequate curriculla for the undergraduate and graduate programs, facilitates research units within the campus, opens the university facilities to the public, establishes cooperative systems with industries, and performs faithful consulting activities to the society.

Among these roles, the research role is the most significant and should not be underestimated because the university nurtures by promotion of the research function the capability of dealing with inevitable problems such as the energy crisis, environmental dilemmas, shortages of food and resources and incurable diseases such as cancer, hepatitis, AIDS and so on.

Particularly in these days quickening protectionism of technologies by advanced countries, the university's research role becomes more significant and for the sake of the scientific potential, we should be concerned with the educational reformation in the university to retain competitive power. In building up not only the technological innovation power, but also the ability to adapt to the radical changes caused by rapid development of the social structures due to the high tech contribution, we should be much concerned with the reformation of the university to consolidate humanities and social science education based on the new philosophy as well.

We have a short history of higher education, but with mass production of graduates with less concern in quality because of feeble environment for the substantial education and research, we have to endeavor to upgrade the university's research potential in order to meet enough supply for the qualified research personnel whose demand is expected to be tremendously high in future. With this regards, I will discuss the growth of our university education, and the prospect in connection with graduate education and research activities and then I would like to propose several necessary measures for development of the research role in the universities.

II. Brief Historical View of University Education in Korea

We know that Kyungsung University established in 1945 soon after liberation from Japanese rule was the first higher educational institute prepared with modern systems, in a sense, in Korea. This university was remodeled after Keijyo Imperial University which was for Japanese students rather than Koreans. In fact, enrollment of science and engineering students at the end of World War II was 363 with very few of Korean students. For example, Korean graduates from Keijyo and Kyungsung University by 1946 was only 71.

When we take the division of the science in the College of Liberal Arts and Sciences of Seoul National University(SNU) as an example for looking back at the earlier development, we can easily figure out the footsteps for the modernization of college systems. Then enrollment of the science division including five departments of mathematics, physics, chemistry, biology and geology was only 86 in 1946. And the first graduateing class with bachelor degrees were six in 1947, 29 in 1948, 18 in 1949 and 33 in 1950. The science division of the college started with only 14 teachers staffs in 1946, among whom one half possessed bachelor degrees received from Japanese universities. Of course, we did not have any other way to teach Korean students than adopting Japanese systems utilizing Japanese teaching materials except Korean language in classes.

As social stability was established by 1950 just before the outbreak of the Korean war, there were a number of new universities, and demand of the teaching staffs was markedly increased. So the science division of the college was the main source of supply for the college science teachers at that time.

In the meantime, the outbreak of the Korean war in June of 1950 took most teaching staffs, students and teaching facilities away from the universities. Only 27 of 210 students originally expected to finish in the science division of the College of Liberal Arts and Sciences at SNU in 1952 could complete their courses successfully in the given period. The decrease in the number of the graduates continued for the successive years, such as 40 in 1953 and 46 in 1954. Education had been performed in the temporary campus opened in Pusan. The production of master's degrees was also only nominal during the war period. Just before the Korean war which was March of 1950, four masters of science were first produced, none in 1951, one in 1952, seven in 1953 and again none in 1954. As the country gradually resevered from the war disaster, the college returned from Pusan in 1954. Its educational environment gradually became normalcy and graduate education also was consolidated. The loss of faculty members, students and facilities during the war was not only to the College of Liberal Arts and Sciences of SNU but also to all colleges and universities. Consequently, it can be agreed that our science education in the modern sense barely began in 1960s, and so we have it with only little over than 20 years of history.

Soon after the liberation, professional schools of various fields were reorganized into a modern system and emerged as colleges within the universities or as individual colleges. Actually, the number of universities (including individual colleges) in 1945 was 19, but it increased to 47 in 1963, 70 in 1965, 85 in 1980 and 100 in 1985. The number of universities in which graduate courses were offered was also rapidly expanded for a couple of decades, and the details are shown in Table 1.

Table 1. Numbers of graduate schools and departments

	Number of schools		Number of departments			
	General graduate school	Professional graduate school	General graduate school		Professional graduate school	
			MS	PhD	MS	PhD
1971	39	27	532	289	39	-
1975	44	38	750	422	58	-
1980	58	63	992	649	116	-
1985	75	126	1,619	1,015	305	-

As the table indicates, there has been a two fold increase in the number of universities offering general graduate courses, and a five fold increase in the number of professional graduate schools in the last fifteen years.

Below is the figures of increases in the numbers of facultly and student enrollments during the last two decades up to 1985. (Table 2)

Table 2. Expansion of the enrollment of students and of teachers

	Undergraduate	M.S.	Ph. D.	Teaching staffs	Ratio of teaching staff/student
	*				
1965	105,643(1.0)	3,598(1.0)	244(1.0)	6,530(1.0)	16.8
1970	146,414	6,122	518	9,265	16.5
1975	208,986(2.0)	12,351(3.4)	1,519(6.2)	11,416(1.7)	19.5
1980	402,979	29,901	4,038	20,900	20.9
1985	931,884(8.8)	57,698(16.0)	10,480(43.0)	33,895(5.2)	29.5

* Number in parenthesis shows proportion to the number of 1965.

Looking over the table, we can easily find the educational environment is worse in the last twenty years from the viewpoint of the teacher's load. The worsening is more peculiar in the period between 1975 and 1985. That is, there have been a four fold increase in undergraduate enrollment, a 4.7 fold increase in master students

and a seven fold increase in Ph. D students but only a three fold increase in teaching personnel bringing the ratio of teachers to students to 29.5 in 1985 from 19.5 in 1975. Such a trend has been more notable in the science and engineering fields. In other words, there was a 4.8 times increase in the number of undergraduates enrolled, 6.2 times increase in master students and 11 times of Ph.D students by 1985 from the figures of 1975. Furthermore, the teacher/student ratio has been markedly increased. The ratio in the pure science showed 28.0 in 1985 but 13.6 in 1975, and the figures became worse in the engineering field, from 34.5 in 1975 to 55.4 in 1985. When comparing the proportion of the college students to total population, they are 31.1 per 1000 in Korea, which is inferior only to the United States (53.6) but greater than that in Japan (20.3). When we compare our teacher/student ratio to that of Japan (15.7) and of the U.K. (14.4), it is easier to realize the heavier load of professors of Korean universities. Despite their ponderous loading, enrollment of graduate students has strikingly increased recently. Comparing the proportion of our students to population with the other countries, ours(1.8 per 1000) is apparently higher than the figures of Japan (0.5) or the U.K. (0.9). The actual enrollment of graduate students in Japan is 66,000 which is almost same size as Korea, but the number of Ph. D students is twice as much as Korea. It is interesting that the rate of undergraduates entering the master's courses in Korea is 10.3 percent which is higher than the rate of Japan (6.6%). However, the rate of the master graduates continuing to Ph.D courses is only 8.5 percent in Korea and 18.7 percent in Japan. The other serious problem of Korea regarding the production of research manpower is that there have been fewer Ph.D graduates due to discontinuance of taking the courses. The following table (Table 3) shows the proportion of Ph.D's in science and engineering produced in Japan and Korea to the number of students undertaking courses for Ph.D degrees in the years of 1980 and 1981.

Table 3. Comparison of the production of Ph.Ds in science and engineering fields of Korea and Japan

		1980	1981	1985
		*		
Japan	S	822/2589(31.7%)	791/2471(32.0%)	-
	E	1186/2358(50.3%)	1236/2218(55.7%)	-
Korea	S	60/463 (13.0%)	71/663 (10.7%)	197/1424(13.8%)
	E	50/630 (7.9%)	63/983 (6.4%)	238/1712(13.9%)

S = Science E = Engineering

* Number of Ph.D produced/number of Ph.D students attending corresponding year, and percentage of Ph.D produced.

As the table shows, the rate of production of Ph.Ds compared with the enrollment of Ph.D students was markedly lower in Korea. Only between 6% and 13% fulfilled their aim to receive the highest degree in Korea while between 32% and 56% of the Ph.D students did. In

Korea, most of the Ph.D students are likely to seek a chance to go abroad before completion of their courses, or to relinquish the courses due for economical reasons. Such a situation has given us restrictions in production of higher manpowers so far. Looking over the future demand of highly qualified manpower, it should be a matter of grave concern to us. In order to prevent brain drain and to produce Ph.Ds in satisfying numbers at home, we shall endeavour to upgrade university roles particularly in research.

III. Role of the Graduate School as the Center of Research Activity

Needless to say, academic achievement comes from active research activity within the university. As we have experienced every day, we know that most of our inevitable problems are solved by active research works in the university and we are convinced whether to possess a strong science and technology capacity is vital to the nation's security in an increasingly competitive world economy. In this respect, advanced countries have made efforts to promote research activities in the university. They are used to having research oriented universities which play a great role in enhancing basic research supported with more funds by governmental and industrial sources. In general, the universities absorb the costs of research facilities such as libraries, laboratories, elaborated equipments technical support personnel and costly but creative research personnel such as graduate students and post-doctoral fellows. Additionally, the interdisciplinary research between different areas are able to be more readily conducted. Thus, the reformation of education and promotion of research in graduate schools are very important subjects in our country. From that viewpoint, we should define again the educational directions of the master and Ph.D courses. In other words, we should define of the master courses not as a phase of the nurture of the production of the researchers proceeding to Ph.D courses but as complimentary courses of the undergraduate. And the master and Ph.D courses must be operated in continuous phases. Particularly, it must be emphasized the role of Ph.D courses is research oriented rather than educational. Of course, those who finished the Ph.D courses must participate in research activities as pre-doctoral fellows. We provide them with the opportunities to serve as teaching or research assistants while they are taking graduate courses. At this moment, we are under consideration of establishing post-doctoral fellowships which is one desirable system to give those with Ph.D degrees the extended chance of researcher at university laboratories or other research institutions. With a broad application of this system, it is possible to nurture creative and vital young scientists.

Thus, graduate schools provide several advantages in conducting research activities, such as ready mobilization of research manpower from various fields within the school, easy utilization of research facilities and equipment facilitated both in school and in attached institutes, and prompt obtaining of the most advanced information by free exchanges between not only domestic but also overseas

institutions. In fact, the level of activities of the research function by graduate schools may be referred to as an index of national prestige. Under such circumstance, we have to look back at our graduate educational systems, and we should substantially reform the systems if necessary.

According to the long range plan for the build-up of research manpower by year 2000, government intends to produce scientists and engineers in the number of 115,000 ten percent of when care to be the uppermost scientists with Ph.Ds or equivalent. That is to say, government plans to raise the rate of scientists and engineers, which is now 10 per 10,000 of the population, to 30 per 10,000 by the year of 2000, as to be comporable with the rate of advanced countries. In addition to this, another large portion teaching staffs, mostly with Ph.D degrees, would be supplied within the given period, since we are studying plans to decrease the teacher/student ratio in the universities by half by the year of 2000. If we attempt to actualize the plans, the graduate schools must be expanded so as to be able to produce exceptionally large numbers of qualified research personnel. Therefore, the actual investment to the universities must be done for the production of qualified manpower, along with the quantitative growth of graduate students.

Recently, as the research role of the university has become significant in cultivating capacity for technology rennovation, it has been strongly emphasized that the academic and industrial research communities are to be close for mutual development. That is, they are the consulting by university faculty for industry, the hiring of university graduates by industry, and sponsoring fellowship, or setting up endowments for the support of faculty research. In general, engineering faculty members have for many years received industrial support for research and sent graduate students to write dissertations in industry. On the other hand, industrial firms have valued university contacts as windows to new developments as well as sources of expertise unavailable within the firm. Actually, with the close contact of the industries and universities, a small investment in university research support or graduate student fellowships has been an effective means of extending their own research capabilities and obtaining early knowledge of new results. Despite the mutual advantages, still the obstacles to closer collaboration are very real in Korea because of traditional suspicion of each other's motives and modes of operation. However, forseeing future demand of the new technologies and economic growth, university/industry relations must be progressively strengthened. It can be assured that promotion of the cooperative relations between university and industry may greatly contribute to fostering competent manpower both quantitatively and qualitatively.

As mentioned before, the university is a center of advanced academic activities by which national development is secured. As we understand, the university is only the site of production of qualified manpower and the place of research of fundamental subjects through which creativity is nurtured. In spite of such a clear role for the

university, investment in the institutions has not been sufficient, and education and research have not yet been promoted as much as we expected. At present, emphasizing the necessity of the support to graduate schools in order to upgrade their roles, I would like to point out the following items that we must take into serious consideration:

1) Establishment of research oriented universities, to which prior support is to be arranged.

2) Expansion of financial support for fundamental research,

3) Establishment of a national center of academic information materials and of its nationwide network with which rapid service for supplying new information is available,

4) Expansion of scholarships, or fellowships to graduate students and pre- and post-doctoral fellowship systems,

5) Reduction of the teaching loads of the faculty members by allocation of more quota for staffs,

6) Allocation of technical support personnel into graduate schools,

7) Development of consortium systems in graduate education,

8) Establishment of the governmental or jointly invested institutions of the common use facilities.

9) Promotion of programs for research personnel and information exchanges, and for coordinating systems between university/industry /public or private institutions.

10) Introduction of private capital to the university for activation of its functions, through endowment funds or contributions.

11) Expansion and support of national research institutions of various fields including humanities and social sciences,

12) Establishment of the accreditation system for roles of graduate schools.

The items listed above are most essential to promote graduate education and research through which higher intellectual knowledge could be transmitted to the coming generations.

Thus, we, facing rapidly changing society through the development of new technologies, need more advanced and creative researchers and therefore, it is necessary to establish graduate schools to perfectly accomplish their roles of the production of qualified persons endowed with capability of confronting such speedy changes in society today.

IV. Patterns and Roles of the Institutes Attached to Universities in Korea

Nowadays, the research activities in the university become more important and essential as much as educational function because the creativity of the new knowledge is produced mostly by the academic activities in the university. Of course, the new knowledge created by the researchers bring about renovation of the educational contents in the university. Thus, the university is the place to encourage students to cultivate a continuous spirit of inquiry on science. As demand of the faithful services by the universities to society has increased, the research role of the university should be accelerated. In this respect, we must emphasize again the function of the institutes attached to the university to be the core of excellence in research.

The first institutes in the university were established in 1955, and increased to 11 by 1960. However, since then, the number of institutes has rapidly increased and reached to 922 by 1985. Such fast growth in number of institutes in a decade presumably depends on the fact that academic society became aware of the university's research role as well as of teaching, and at the same time, increased funding to faculty members to support the research activity has been followed by increased needs of science and technology innovation.

If we classify the institutes according to field, those of humanities and social sciences are nearly 60 percent of the total, and of science and engineering are 23.2 percent. Presumably, since the science institutes require more funds and facilities for establishment, their number is smaller than the others. It is a rather common trend through institutes that the teaching staffs in the university are in double appointments as research staff of the institutes to which the solid spaces, research facilities, research supporting personnel such as administrators or technologists and their own budget are not generally furnished. In most of cases, the institutes have done services only as a window for submittance of research proposals and as a body for the publication of the results obtained by the research activities of teaching staff.

Such a system showed us its malformed function, and may greatly contribute to upgrading the research role of the university. In this regard, it is urgent to take necessary measures to reform the structure and function of the institutes for promotion of research efficiency like those of the advanced countries.

If we look back the history of funding university faculties to support research work by the Ministry of Education, we are able to see the governmental endeavour to contribute to academic research promotion. The first allocation in the governmental budget for the support of research activity by university faculty members was made in the amount of 17 million won in 1963, and its amount became to 13 billion won in this year. The Ministry of Science and Technology also allocated funds for grant-aid to science professors to support their

research works through the Korean Science and Engineers Foundation. For this purpose, 11 billion won is to be expended this year. Thus, more than 20 billion won is planned to be distributed to professors for their proposals through institutes except some personal contracts on special programs. In this connection, it is true that the situation in university institutes has been gradually activated. Fortunately, these days, more professors of science and engineering fields have been funded for their research works from industries as well as from government. Though the government is trying to concentrate its efforts to strengthen the capability of our research funding grants to the universities, R & D spending is limited, so we still feel the necessity for more allocation of funds for supporting research activities. In fact, it is reported that Johns Hopkins University alone spent 388 million dollars. MIT did 243 million dollars, and each of 20 other prestigious American universities spent more than 100 million dollars in 1985. Almost 70 percent of the grants came from government and the remainder from industry, and their institutional sources. I understand that Japan also supports university research activities, funding great amounts of grants from government and from industrial firms. For example, the Institute of Space and Aeronautical Science attached to the University of Tokyo spent annually more than 10 billion Yen including operating costs, and the Institute for Molecular and Cellular Biology attached to Osaka University was funded by the government with five hundred million Yen for research grants in 1984.

As an indication of the governmental effort in the development of the potential of basic science research within the university, the Ministry of Education began to support its program started in 1979. The program is to grant-aid to basic science research institutes installed in several universities for carrying on joint projects in the fields assigned by ME. The institutes participating in the program are funded yearly upon recommendation of an evaluation team composed of specialists, and we intend to foster the individual institutes to become the center of research excellence for assigned specific fields. Though the size of the fund is not satisfactory enough yet, it is significant enough to provide the chance to professors to devote themselves to upgrade their own major fields and to build-up the critical mass of research potential. I think that this sort of programs is one of the adequate systems when I look over our present circumstances with its shortage of research manpower and in scanty fund sources. Consequently, it is necessary to make an effort to systemize our university institutes to a solid form and to keep the connection with graduate education. I am convinced that our system will certainlly develop institutes like those of the advanced countries.

V. Conclusion

I have discussed on the roles of the university in conjunction with research activity. In general, the university is the final and the highest educational institution, and it is the place to produce

highly qualified manpower through driving students into creative research. To accomplish this function perfectly, most universities establish graduate courses for master and Ph.D degrees, and they install research institutes to perform academic research in connection with the graduate education. As far as we know, the most advanced and fundamental research has been conducted in the university-attached institutes, which have contributed generally to promoting academic development. Sometimes, the productivity of the results of the researches by the university institutes is used to serve the national prestiges, and most advanced countries have put their effort to support the university research function by funding more or providing better systems and environments.

Comparing the situations of the other advanced countries with ours, we easily find the latter inferior very much to the former from the viewpoint of R & D spending, research manpower resourses, and the graduate educational environment. Actually, R & D spending by our universities is very nominal, and qualified researchers are under the critical mass, and the educational system of graduate schools is not adequate to achieve their goal because of the heavy load of university faculty members, poorer educational and research facilities, and nominal function of the university-attached institutes. Studies of the other countries on the year 2000 show, they have already driven their endeavour to produces prosperous society by themselves, providing more investment to universities, and emphasizing the role of fundamental research activities in the university-attached institutes. Such changes these days have brought severe competition in science and technology among countries. It is apparant that we would become left far behind not only in economic but also academic achievement from the advanced countries which already have taken necessary measures for the future, unless we put more of our efforts to nurture our research potential by encouraging the research function of the university, and university itself endeavour to reform the systems to give more sufficient education in graduate courses and to conduct research works in the institutes.

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SUMMARY AND CONCLUSION

Summary and Discussions on Papers of Korean Speakers
Reform for Survival in Japanese Higher Education

SUMMARY AND DISCUSSIONS ON PAPERS OF KOREAN SPEAKERS

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The two-day conference held on July 7 and 8 brought together Japanese and Korean specialists on higher education in a collaborative attempt to address current issues of common concern. The significance of this conference lies in the bumper crop of new ideas that were exchanged on how to resolve the problems that we face today in higher education. Six papers were presented by Korean scholars, and what follows highlights the major points of emphasis which cut across all the papers.

Dr. Suhr, Myung-won, Chairman of the Presidential Commission for Educational Reform, noted some points which deserve attention in his paper titled, "Some Reform Proposals for Korea's University Administration and Management".

The first point concerns the harm of excessive control by the government, which undermines, the autonomy of universities; the government determines student quotas, tuition and fees, and prescribes admission and administrative procedures. The lack of autonomy is a feature of not only national universities but private ones as well.

Second, universities are hardly differentiated in terms of educational programs and structural and operational modes despite the fact that they vary in size, ownership, local needs, and educational ideas and goals. The result is the absence of role differentiation based on their unigre idiosyncracies uniformity is the hallmark of our curriculum.

Third, with our increasing number of people rushing to universities, higher education has developed enoromously in quantitative terms - marked by size and accessibility to masses of people - to the virtual exclusion of excellence. Seas of mediocrity engulf scattered islands of excellence; educated people are abundant, but those who possess the quality of high-level man-power are few.

Fourth, administrative and managerial structure features a highly centralized authority. Educational planning and policy formulation are in the hands of a few, and the one-way flow of directives and orders going from the top down is another stumbling block which stifles creativity. The same trend applies to the internal administrative pattern of universities as well. Decentralization was suggested as a means for ensuring effectiveness in catering to a wide variety of individual needs. It is also considered as a sure road to effect inter-institutional cooperation.

Fifth, the importance of a financial base which ensures the continual supply of resources was underscored. The availability of necessary funds alone is not enough to ensure educational development, unless it is coupled with effective operation. Dr. Shur's paper represents the principles which underlie the educational reforms presently advocated by the Presidential Commission for Educational Reform which he directs. He argues for plurality instead of uniformity, open-ended formulation of policy instead of a self-contained process, and flexibility instead of rigidity.

In his paper titled "Social Service Functions of the University", Professor Lee, Kyu-hwan emphasizes the importance of the social service functions of universities as a system subservient to society. He asserted that Humboldt's advocation of what a university is about has become irrelevant in today's world inundated by waves of new scientific and technological knowledge. New demands compel concern for "opening the door to universities". Discussions centered around the concept of the free university as an ideal alternative to the present educational system.

The social service functions of universities in Korea are divided into three categories. They are: (1) training manpower for industry and economic growth, (2) opening the university to all members of the local community, and (3) off-campus services offered by university professors, staff, and students.

It was in the early 1980's that concern for the educational service of universities began to take institutional forms in Korea. Korea Air and Correspondence College (now upgraded to the status of a university) and open universities came into being. Despite the distinct needs of their students, they are not distinguished from other universities. Educational programs still reflect uniformity, far from serving the wide variety of individual needs. Inflexibility also marks the admissions system. For instance, applicants for admission are required to complete high school education, and this actually excludes those who are qualified on the basis of criteria other than previous schooling experience from access to college education. Their educational programs at large feature emphasis on industrial and technological needs.

Cognizant of these problems, Professor Lee suggested that the "free university" originated in the United States be adopted as a model. A free university is defined as an institution that offers noncredit classes to the general public in which anyone can teach and learn. This definition demands that the opportunity for education should be accessible to those who desire it, with the criteria for entry less based toward academic standards, and programs diversified enough to satisfy a wide variety of individual needs. In order for universities to serve the educational needs of the general public, its resources and facilities should be made available beyond the boundary of its campus. Professor Lee recommended that regular universities in Korea be open to members of the community to provide not only formal higher education but also informal continuing education, with a view

to promoting their social service functions in the context of providing life-long education.

Under the topic "On the Nature and Scope of Student Participation in Policy-making for University Governance", Professor Hyung-heang Lee addressed the question of "how and to what extent students should have a voice in university governance". In-depth discussion on this issue is timely, especially with the students' outcry for a formalized voice in determining matters which affect their lives on campus.

In an attempt to advance a case advocating the participation of students, Professor Lee enumerated the three major missions of universities which are teaching, research, and public service and pointed out that the nature of each of these major functions has changed. As modern society, with its insatiable demand for expertise, has shaped today's universities to serve its needs, student guidance has come to prominence as a new issue to be addressed.

There are pros and cons regarding the participation of students in governance. One argument for their participation is supported by the fact that the amoung and kind of education students receive largely determines their social status, economic well-being, and the effectiveness of their participation in community life. Since they are the recipients of its benefits, they are understandably asking why they do not have a recognized voice in determining its character and quality. Another reason relates to the concerns, motivations, and professional competency of youth today. They are more capable of rational thinking. A third justification stems from the declared goal of higher education, that is, to prepare youth for the exacting responsibilities of citizenship in an increasingly complex democratic society. The proper role they play in university government is an important element of education directed to this goal. Fourth among the reasons, students have the vantage point to detect deficiencies in present curricular offerings. Since students are the focus of educational activity, they are better informed about educational substance and process. Students, by being directly involved in the process of learning, gather insights which are useful for constructive criticism and evaluation directed toward the improvement of instruction.

While some reasons can be advanced in favor of the participation of students in university government, others oppose it on the following grounds. In the first place, some serious academicians believe that their participation may confuse the established order of administration and conflict with the ends of higher education. The resulting dominance of students would make it difficult to make headway in a desired direction. The immaturity of students is believed to undermine the effectiveness of a body composed of specialists. Their preoccupation with studying does not allow for a sustained participation. Simply having an emphemeral interest is not enough to ensure a full degree of familiarity with sophisticated issues. Among others, interference with their studies and employment preparation is cited as the major reason against the participation of

students. Everyone doubts whether even the ablest student could devote the large proportion of his time out of class required for committee work without adversely affecting his educational progress. Amid the tumult of conflicting views, Professor Lee stands in favor of the participation of students in university government while accentuating the necessity of institutionalizing a new administrative structure which assures all its constitutents the rights of free speech and free opinion. The educational system in Korea has been indifferent to this need. Students have been stripped of the opportunity to make their voices heard. If this trend continues, the service function of universities, particularly regarding guidance programs, will find no place in the university. The question is not whether students should participate, but rather how, to what extent, and through what innovations in organization and procedures this involvement can be most expeditiously and effectively achieved.

Professor In-jong Yu gave judicious thought to the problems and new directions for university curriculum in Korea. His paper drew special attention for its new ideas on how university curriculum should be developed. Whatever the educational goals of a university might be, it is through curriculum and programs that the goals are manifested in the behavioral patterns of individuals. In this sense, the curriculum is a specific manifestation of educational ideals and goals.

Problems associated with curriculum are summarized as follows. At the forefront of our thinking is the uniformity of curriculum, characterized by disciplinary emphasis, a disproportionately large share of required subjects, and fixed time schedules. Programs are blamed for the lack of relevance to emerging needs. There is a frequent duplication of program content and links between subjects are hardly noticed. Program contents are seldom sequenced logically between grade levels. Curriculum defies the need to reflect the characteristics of program contents which vary with the type of university and the goal of education it adopts. The organization of curriculum is fraught with many inconveniences. Much of the contents of general study courses are identical with those of high school programs. The general study course centers around humanities and natural sciences, and social sciences are given a taken treatment. Since most of the general study subjects are taken in the first two years, there is heavy reliance on part-time lecturers for teaching.

Professor Yu presented specific ways to solve the aforementioned problems and improve curriculum.

First, curriculum should reflect an optimal mix of academic and professional concerns.

Second, by organizing curriculum based on broader fields of study, it is possible to tear down barriers between disciplines which are typical of disciplinary departmentalzation.

Third, the number of subjects should br re-adjusted in a way that reduces the number of required subjects in favor of elective subjects.

Fourth, inter-disciplinary links among the various subjects, fields of study, and colleges should be maintained together with a graduated sequence between grade levels.

Fifth, each college or university should be required to formulate its own curriculum distince from others.

Professor Choong Hoe Kim's "Problems of Teaching Methods in Korean Higher Education" accentuated the importance of instructional techniques by stating that the effectiveness of higher education rests of the quality of teaching.

Among Korean professor, lecturuing is the predominant mode of teaching (64%). Although this method is blamed for having many inefficiencies, it is still considered a convenient way of delivering information to a large audience in a short span of time. Greater effectiveness in learning can be expected when a professor demonstrates a high teaching ability, but these merits are outweighed by its inefficiencies. Lecturing is one-way communication which deprives students of the chance for spontaneous and timely participation in the process of learning. Being lectured by teachers also means the lack of time to think critically. According to Dr. Kim's findings, a high percentage of students are critical of this method. Despite this proven inefficiency, the majority of professors still adopt this method. Professor Kim attributes this tendency to a number of factors. The mistaken notion that the university is the place where professors impart knowledge through lecture is widely held among educators. Teaching is equated with lecturing. The size of class is another factor which makes it impracticable to adopt teaching methods other than lecturing. Forth-three percent of the surveyed classrooms accommodate more than 60 students per class. Professors are burdened with teaching an average of 20.8 hours per week. This teaching load does not allow them to think about other teaching methods. There is an inherent lack of enthusiasm on the part of professors to improve their teaching style, and this is coupled with the absence of a diversity of teaching/learning materials to practice a wide variety of techniques in the process of instruction.

To overcome these problems, each university should be responsible for the development of its own instructional system. University-wide research for new ways of teaching is in order, with more resources allocated to continue it on sustained basis. There is much pressure from all directions on every citizen in a democratic society. Professors are no exception.

Professor Wan-kyoo Cho's paper concerns the role of research in the university an in graduate education. He accentuated the research function of university as the major buttress for efforts to upgrade the quality of higher education.

It is a well known fact that higher education in Korea has achieved enormous progress in quantitative terms since 1945. The growth in the number of graduate students has been phenomenal, particularly since the 1960's, and hardly rivaled by any other country. To illustrate this point, there were 39 graduate schools and 27 professional schools in 1975; in the span of ten year, their numbers rose to 75 and 126 respectively. The number of graduate students shows a sixteen-fold increase in Master's degree candidates and a forty-three-fold increase in doctoral candidates over those of 1965. The ratio of students-to-teacher increased from 16.8 in 1965 to 29.5 in 1985, thus aggravating classroom conditions. There are more factors which account for the poor condition of graduate studies and are thus not conducive to research-oriented education.

Professor Cho also highlights the importance of research from the viewpoint of what is looming over the horizon. Research is viewed as a means for the survival of a nation in the world that sees competition growing among its constituent states. There is a clear mandate that the university be research-oriented. In this connection, Professor Cho made the following suggestion.

First, the structure of graduate studies should be reorganized in a way that integrates the two separate courses, Master's degree and doctoral, into a continum. This arrangement will convert the former into a stepping stone to the latter and put them in a single vein which makes for the continuity of graduate studies.

Second, research-based study should be introduced by reducing the portion of teaching in graduate programs. The graduate program is essentially to provide mixımum exposure to research under the guidance of professors, and teaching should be the least concern of the graduate program.

Third, the research function of universities should be effectively linked to those of industrial firms and other institutes. There is tension between the two categories coming from their different purposes and modes of operation. They may even be suspicious of each other on this account. On the other hand, the harsh reality facing the two forebodes demise for them both, unless they are bound together by the greater cause of advancing technology in the interest of common good.

Fourth, the raison d'etre of the modern university lies in its commitment to research. As the cradle of new knowledge, the university deserves support from the state and social and industrial organizations, since they are the recipients of benefits accruing from research. A continual stream of research can be expected when the continuity of financial support is guaranteed. Financial support may take the form of a research grant, scholarship, or and endowment fund.

Fifth, there is no need for all universities to develop into the same type. Depending on the unique needs of each university, each should develop its own unique features. Research-oriented programs of

making a college exclusively devoted to research will be one way to distinguish the program of a university from others.

Professor Cho's conclusion is worthwhile to heed that it is apparent that we will be left behind other developing countries not only in the economic but academic achievement as well, unless we take far-sighted action to encourse research in the graduate programs. While we are stymied by traditional inertia, other countries are running away beyond the horizon of our sight.

Five papers were presented for consideration by the participants. In an attempt to summarize them, I cannot but be concerned with the common threads that weave through these papers.

First, in order for the university to survive in the sophisticated society which witnesses the rapidly advancing frontiers of technology and growing competition among states, it must be ensured of a full degree of autonomy for self-growth. Having experienced government control and initiatives, universities in Korea have fostered an inclination for dependency which hinders their development. Amid a confluence of new needs, the university will be debilitated in performing its teaching, research, and service functions, unless it is given the autonomy to have creative participation in the process of its self-improvement and experience the consequences of its own actions.

Secondly, each university should undergo its own unique development, steering away from the mere duplication of other universities. The uniformity of programs results in the waste of resources, and the sheer size of the university is no longer an asset but more often a liability.

Third, flexibility should be built into all facts of the university system, viz., administration, curriculum, teaching methods, and student guidance. Confronted with emerging problems of new dimensions, inflexibility is the source of tension and conflict which enervates the functions of the university.

Fourth, efforts should be made to develop the capability of the university to engage in extramural education. This demands that universities be open to clientele beyond its walls. An open system is commendable for its contribution to effecting inter-university cooperation. This principle also applies to intramural activities. A tangible benefit of implementing such reforms is that "being open" removes barriers between disciplines and effects inter-departmental cooperation.

Autonomy, uniqueness, flexibility, and openness are the basic guiding principles for today's universities resulting from the scholarly dialogue on the given topics of this seminar. They form the underpinnings of efforts to reform higher education.

REFORM FOR SURVIVAL IN JAPANESE HIGHER EDUCATION

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I. In the face of numerous pressures,Japanese higher education is being forced to consider real reforms. These pressures,while difficult to deal with now, may be a blessing in that they are forcing universities to raise their productivity in both teaching and research. Among these pressures, financial ones are outstanding. Since the beginning of the 1980's the government has ordered a zero or minus ceiling on all budgets including higher education and this is forcing the universities to consider new strategies for survival other than simply asking for more government support. Another sort of pressure comes from the outside. Japanese universities can no longer hide inside their shells, they must cope with increasing criticism from foreign students, foreign academics and international associations such as the OECD. Faced with these and many other complex problems, the Japanese government established the National Council for Educational Reform directly under the Prime Minister's Office.

In considering these and other issues during the course of the seminar, our speakers have brought to light a great deal of important information on the situation which Japanese universities are facing and have offered fresh suggestions for improvements. Here we will attempt to summarize some of the main points.

II. President Iijima has clearly and precisely described national, public and private university governance. He points out that in contrast with other nations, financial supports and subsidies of the Japanese government to higher education are quite low. For private universities which bear a heavy 75 percent of Japanese students, decreasing subsidies are yet another blow to their livelihood. President Iijima describes the historical and present role of the faculty meeting and its importance in preserving university autonomy. However, he also discusses the need to increase flexibility; certain legal regulations of the Ministry of Education, Science and Culture need to be reconsidered. Finally as the chairman of the Higher Education Section of the National Council for Educational Reform, he recommends the establishment of the "University Council" which would promote constructive reforms of Japanese higher education.

III. Professor Amano in discussing the relationship between higher education and societal change, offers a number of sharp and penetrating insights. Since the massification of Japanese higher education which began in the 1960's, universities have more or less

kept up with the demands of industry and society. One example of this is, in spite of the criticized undergraduate program, industry welcomed graduates, whom they would retrain for their own purposes. During this period, university graduates had comparatively little difficulty in getting employment. Over the past ten years, the university population has been stable, and student numbers as well as establishment of new institutions were kept under control by the government.

A second boom in university establishment, however, is now underway due to a temporary increase in the 18 year-old population. This boom period will be followed by a sharp drop in population resulting in severe financial problems particularly for private universities. Professor Amano is greatly concerned with how Japanese universities, with little experience in dealing with such crises will adjust to these difficult times ahead and how they will be able to attract new clients outside of the 18 year-old population.

IV. Professor Kato brings up the question of student problems from a psychologist's perspective. Professor Kato focuses on the students who have become mentally ill and discusses a number of factors related to their inability to live a normal independent life. Reward is seen as acceptance or praise by family or authority figures. Passing entrance to a prestigious universit is a way to gain this acceptance. Without it, many students cannot adapt psychologically. The role of the mother in ingraining this kind of dependency is discussed. Many students are so concerned with achievement and success in their entrance exams to uiversity that they lose touch with any other goal and become lost at the university. Their goals are too limited and short-term. As they have neglected their socio-cultural developmet, they cannot get involved with others. It is no wonder such young people face the danger of psychological illness. Professor Kato concludes his discussion with the main socio-cultural and historical reasons why examination pressure is so intense.

V. Teaching and the university curriculum are the main issues of Professor Kitamura's highly critical paper. From the results of national surveys on professors' attitudes toward teaching done by the Research Institute for Higher Education of Hiroshima University under his supervision, many criticisms about teaching at Japanese universities were raised. Among these, teaching was seen as less prestigious than research, and curriculum was regulated and formed without consideration of students.

Professor Kitamura points out that more and more unmotivated students are entering the university and much needs to be done to develop teachers who can deal with, educate and stimulate unmotivated students. He strongly makes a case for faculty development to inprove university teaching. In reference to David Riesman's student consumerism, he predicts a similar phenomenon to occur in Japan and points out that Japanese professors can no longer afford to neglect the needs of their students.

VI. In relation to teaching issues, Professor Sakamoto explains via case studies the importance of educational technology for improving university teaching. Notably, he introduces a number of innovative experiments in terching using VTR and Microcomputers. He also describes a now well-known innovation being carried out at his university,(Tokyo Institute of Technology) that is a lecture transmission system using optical fiber. The significance of distance teaching such as correspondence courses, the University of the Air, the Institute of Multi-Media Education were discussed. However he mentions several handicaps in promoting the utilization of educational technology, among these are: lack of interest and desire, bias against technology in the education research field and lack of funds for development.

VII. In discussing the research function of the Japanese university Professor Ushiogi focuses on graduate education. The issues of quality and quantity were discussed in comparative perspective. He notes that the masters courses of engineering seems much more successful than other courses, particularly humanities and social sciences. This success is greatly due to a good matching with industry and the labor market. Outside of engineering the masters course has litte actual function in society except to provide a gateway to the doctoral course.

In discussing the doctoral course, two significant problems arise: 1) the mismatch of desire with actual professional opportunity causing the so-called "Over Doctor" phenomenon especially in the natural science field. 2) granting of doctoral degrees is extremely limited in humanities and social sciences due to old conceptings of what a doctorate should be. This is causing great problems with foreign students in Japan as well as with young Japanese scholars. Finally, Professor Ushiogi explained new attempts in graduate school such as the granting of special fellowships to help young scholars and the establishing of a new type of masters course which will include more practical and professional education to facilitate entering the workplace.

VIII. In conclusion I would like to add a few of my personal impressions of the presentations. First, the papers by the Japanese participants may not have covered all the problems within Japanese higher education, but I feel as if they have brought together most of the essential problems being faced. Second, from the content of the disucssions I could feel a less than optimistic current, but I could also feel a determination to design strategy to confront man of the difficulties discussed. To put it briefly, the situation is severe but certainly not hopeless. Thirdly, I understand that one of the most important tasks of Japanese higher education is to keep searching for excellence. This challenge is not only being expected from within Japan but also more and more from foreign countries.

Finally, through the discussions of the past two days we have obtained so much valuable information from the excellent Korean presentations and I would like to thank our gracious hosts at KCUE for

providing us with this splendid learning experience and for their warmth and many kindness extended to us during the seminar.

Profile of Contributors

Myong-won Suhr was born in 1919 in Nonsan, Korea. He received his B.A. from Kyungsung (Seoul) National University, his M.A. from Peabody College for Teachers and his Ed.D from Peabody College. He joined the faculty of Ewha Womans University in 1948 and in 1957 moved to Seoul National University where he held a number of major positions such as dean for academic affairs and vice president. He has served as vice minister, at the Ministry of Education and president of Chungnam National University. He is currently Chairman of the Presidential Commission for Education Reform. He is author of Principles of Education, and Teaching Profession and Teacher and coauthor of Educational Sociology.

Soichi Iijima is currently president of Nagoya University where he was educated and started his teaching experience. He was professor of medicine at Hiroshima University from 1961 to 1968, where he served as president from 1967 to 1977. He is a member of the National Council on Education Reform and chairman of its subcommittee, Reform in Higher Education. He is also an executive of the associaition of National Universities.

Ikuo Amano received his B.A. from Hitotsubashi University and the University of Tokyo, and his M.A. from the University of Tokyo. Since 1966 he had been a researcher at the National Institute of Education Research and in 1971 he became assciate professor at Nagoya University. Since 1979 he has taught at the University of Tokyo and is currently professor of education there. He has published many books including Structure of Japanese Higher Education and Social History of Examination in Modern Japan.

Kyu-whan Leeis professor of education, Ewha Womans University. He has served as president of the Korean Society for the Study of Educational Society and president of the Korean Society for the Study of Comparative Education. His degrees include a BA from Seoul National University, MA from University of Washington and Ph.D from Ewha Womans University. He has been a guest professor at European Universities. His interests include comparatve education and sociology of education and he wrote a number of books, including Social Development and Democriatization of Education, and Education in Capitalist Societies.

Hyoung-heang Lee is professor of Education at Yonsei University where he has served as chairman of the Department of Education and Associate Dean at the Graduate School of Education. His degrees include B.A. and M.A. from Yonsei University, M.Ed from Utah State University, and Ph.D from State University of New York at Buffalo. He is author of New Educational Administration.

Taizo Kato was educated at Tokyo University and got two B.As and an M.A. from there. From 1973 to 1975 he was a visiting scholar at Harvard University under the Harvard Yenching Institute Fellowship program. Since he started his teaching experience as a part time lecturer at Waseda University, he has taught sociology for 19 years. Now he is a professor of sociology. He has published many academic books such as The Thought and Behavior of Young People, Causes of Personality Disturbances in Present-day Man and Happiness and the Meaning of Life.

Kazuyuki Kitamura was born in 1936, in Tokyo. He graduated from Waseda University, Faculty of Literature. After studying at the graduate school of Tokyo Metropolitan University he became a research librarian at the National Diet Library. In 1972 he joined the faculty of Hiroshima University (Research Institute for Higher Education) and he is currently professor at the same university. He is the author of books: The Internationalization of Higher Education, The Age of Student Consumerism, and Comparative Higher Education.

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